APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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022930                        LM01/0330
HOWREY SIMON ARNOLD & WHITE LLP
BOX 34
1299 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20004
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EXAMINER
LUTHER,W

ART UNIT	PAPER NUMBER
2731	

DATE MAILED: 03/30/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 08/397,636	Applicant(s) Harvey et al.
Examiner WILLIAM LUTHER	Group Art Unit 2731

☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire _____ **3** ___ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *(see attached Office Action for status of the pending claims)* _____ is/are pending in the applicat

    Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

    ☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

        ☐ received.

        ☐ received in Application No. (Series Code/Serial Number) _____ .

        ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    *Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- *SEE OFFICE ACTION ON THE FOLLOWING PAGES* ---

DETAILED ACTION

1.   This action is in response to 4/30/99. Remarks that exist for pending claims 1-152, have

been considered but are moot in view of the new ground(s) of rejection.

Overview.

As a preliminary matter, it is understood that applicants and the PTO have agreed to

consolidate co-pending applications from ~329 in number to ~78 in number wherein applicants

"claim" priority benefit under Section 120 for ~41/78 to 9/11/87 ('87), and ~37/78 to 11/3/81

('81). However, to date, applicants have failed to complete the consolidation. For example and

for illustration, in the group of 37/78, examiner finds consolidation papers for **only** 23 of 37.[1]

Applicants must understand that their failure, to date, to complete the consolation has contributed

to delay in prosecution, noting that the agreement to consolidate was made over an **entire year**

ago.[2] Clarification is requested for when applicants intend to carry forth completion of their

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[1]See Appendix **B** for examiners count of cases having consolidation papers. It is noted,
for ex, that "group" 8 fails to map the claims, and hence is not within consonance of agreement
and therefore is recognized as an amendment to an outstanding office action.

[2]For illustration, it is noted that the co-pending application no. 08/474,964 (see "group"
30 in Appendix **B)** consolidation was received *3/9/99.* Therein, on page 9 (paper 20), applicants
allege "In consonance with the agreement...Applicants...join the claims", etc.

agreement. In any event, Office actions have been mailed on 2 consolidated groups[3], and the

remaining now follow.

Section 112.

Written description.

In the Summer/Fall '97, responses to the ~37/78 co-pending applications' first actions' on

the merits, applicants claim priority benefit, under Section 120, to 11/3/81. However, when

responding to Section 112 written description rejections, applicants refer to the *parent* patent

4,694,490, ('490) disclosure as "the specification". However, it appears they have mistaken the

patent '490 specification for the instant specification. The reason the instant specification is not

the '490 specification is because applicants failed to incorporate-by-reference the '490 ('81)

specification into the later '87 specification first disclosed on 11/9/87. Because, *inter alia*, it

appears applicants have:

- generally ignored the instant specification; and

- apparently drafted the pending claims with respect to *"only"* the '81 disclosure; and

- generally responded to Section 112 written description rejections by citing sentences

passages, and paragraphs, that ***do not exist*** in the instant disclosure;

pending claims are rejected as failing Section 112's written description requirement.

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[3]Groups 27 and 33 in Appendix **B**, or co-pending applications 08/470,571, and
08/487,526, respectively.

Because applicants have apparently mistaken the parent '490 disclosure for the instant

disclosure, all pending claims are rejected under Section 112's written description requirement.

Each claim has been raised into doubt by the manner in which applicants have responded to

previous Section 112 rejections. Hence, examiner respectfully requests applicants to:

- identify any disclosure *common* to both the parent '490 and the instant disclosure, and

then demonstrate full support under Section 112, by *only* the common subject matter.

Examiner respectfully requests that applicants be *very careful not to* identify subject

matter that was omitted when making the 9/11/87, disclosure; and be *very careful not to*

identify subject matter that was added when making the 9/11/87, disclosure. The

consequence, of course, would be failure to demonstrate Section 112's written description

requirement.

Moreover, because, *inter alia*, applicants have apparently mistaken the parent '490

disclosure for the instant disclosure, <u>Section 112 written description doubt has been raised by</u>

<u>applicants</u>. As a consequence, *examiner respectively requests applicants demonstration*

support for <u>at least</u> every pending claim in the manner described above. However, it is

suggested applicants demonstrate support for *each* phrase enumerated in the Section 112 written

description rejection below.

Enablement:

Moreover, terms and their derivatives such as 'digital' and 'data', *inter alia*, are considered to require undue experimentation in view of the *instant* disclosure. Therefore, pending claims reciting the terms and derivatives of the terms are rejected under Section 112's enablement requirement.

Best Mode:

Notwithstanding, for the reasons, *inter alia*, explained below in the corresponding rejection below, pending claims are rejected under Section 112's best mode requirement.

Second Paragraph.

Further, because applicants have apparently mistaken the parent '490 disclosure for the instant disclosure, pending claims are rejected under Section 112's second paragraph for reasons, *inter alia*, including: failure to claim the invention; failure to recite terms whose meets and bounds can be determined *from a reading of the instant disclosure*. This rejection may be withdrawn when applicants *accurately* explain the specific meaning of every pending claim term when there are different descriptions for such terms from '81 and '87 including, *inter alia*: programming; data; information; instruction; signal; and every other term having a difference in respective '81 and '87 descriptions.

Double Patenting.

Pending claims are rejected under the doctrine of judge made double patenting as they would extend obvious variations of already enjoyed monopolies. Pending claims are not distinct and independent from patents: 5,335,277 ('277); 5,233,654 ('654); 5,109,414 ('414); 4,965,825 ('825); 4,704,725 ('725); 4,694,490 ('490).

See Appendix A.

Notwithstanding, applicants have recognized his patents have been involved in litigation. Examiner believes it is *critical* that applicants provide claim constructions for his patents from those litigations, for obvious type double patenting examination, as they are understood to be directly relevant to the instant rejections.

The Administrative requirement is maintained.

Sections 102 and 103.

For the benefit of compact prosecution, examiner addresses the pending claims as thoroughly as possible with other prior art in rejection, even though applicants have apparently mistaken the parent '490 disclosure for the instant disclosure.

However, because the '490 parent disclosure is very brief, for ex, approximately 11,800

words, examiner addresses the pending claims to the *limited* extent they are *conceptually*

recognized <u>by examiner</u>, in *embodiments previously identified <u>by applicants</u>* when mistaking the

parent '490 disclosure for the instant disclosure in response to, *inter alia*, previous Section 112

written description rejections. That is to say that pending claims are *grouped conceptually* and

are addressed by application of prior art according to their conceptual grouping.

Although applicants, in fact, omitted most sentences, paragraphs, and figures, of the

parent '490 disclosure when making the later 9/11/87 (co-pending parent 08/113,329)('329),

disclosure, (i.e. corresponding to the instant disclosure) they allege to have incorporated-by-

reference the documents, paper 21 of '329, *inter alia, <u>into page 1</u>* of the 9/11/87, disclosure when

making <u>the instant disclosure on ~6/95</u> (see respective preliminary amendments accompanying

Section 120 filings of co-pending applications). Section 120, however, does not permit the

apparent hiatus of subject matter, from 9/11/87, to '95, i.e., the instant filing date, for the priority

benefit under Section 120 to the 11/3/81, disclosure. Hence the added subject matter is not

impermissible new matter. However, it is anticipated by the '490 and '725 patents when it gets

the '95 effective filing date.

<u>Oath or Declaration.</u>

The instant disclosure appears, *in fact*, to be a continuation-in-part, because, by

applicants' own indication, the intention of the preliminary amendment's' 'incorporation-by-

reference' statement, was for incorporating all documents of the '329 parent *into* page 1 of the instant disclosure (applicants should refer to the related remarks, *they have provided,* on the record).

Objection to the Specification.

The instant specification is objected to because applicants are changing the instant disclosure, some +18 years after making the '81 disclosure and some +12 years after making the '87 disclosure.

I.D.S.

Examiner specifically requests applicants identify the most relevant art, in the information disclosure statements, to the pending claims. Examiner believes identification of such art is critical to determining patentability.

Claim Rejections - 35 U.S.C. § 112

2.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3.   Claims 1-152, are rejected under 35 U.S.C. 112, first paragraph, as containing subject

matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had

possession of the claimed invention.

Considering claim 1, there is no support for:
                    -A method of distributing;
                    -data units;
                    -said data units comprising;
                    -an information portion and;
                    -an identification portion;
                    -said identification portion;
                    -identifying;
                    -at least;
                    -one characteristic of;
                    -said data units;
                    -said method comprising;
                    -the steps of: receiving;
                    -a plurality of;
                    -said data units on;
                    -a multiple channel data stream;
                    -at least;
                    -some of;
                    -said data units being received;
                    -sequentially;
                    -and performing;
                    -the following steps;
                    -for each of;
                    -said received data units:
                    -(a) storing;
                    -the received data units in;
                    -a data buffer;
                    -(b) decoding;
                    -the identification portion of;
                    -the data units;
                    -toidentify;

-the;
-at least;
-one characteristic of;
-the data units;
-(c) determining whether;
-the data units should be distributed before;
-or;
-after one;
-or;
-more other of;
-said data units based on;
-the identified characteristic of;
-the data units and;
-(d) transmitting;
-the data units in;
-an order relative;
-toother of;
-said data units based on;
-said step of determining.

Considering claim 2, there is no support for:
-The method of claim 1 wherein;
-said step of determining;
-comprises;
-the steps of:
-comparing;
-the identification portion of;
-the data units to;
-predetermined information designating;
-the order of distribution of;
-said data units;
-and;
-determining;
-the position of;
-the data units in;
-an order of distribution;
-of the received data units based on;
-said step of comparing;
-the identification portion.

Considering claim 3, there is no support for:

-The method of claim 1 wherein;

-said step of determining;

-comprises;

-the steps of:

-comparing;

-the identification portion of;

-the data units;

-tostored schedule;

-information designating when each of;

-said data units is;

-tobe distributed;

-and determining when;

-the data units should be distributed based on said;

-schedule information.

Considering claim 4, there is no support for:

-The method of claim 1 wherein;

-said step of transmitting comprises;

-the steps of: changing;

-said transmission order of;

-the received data units based on;

-said step of determining;

-outputting;

-the data units;

-tooutput ports in;

-said changed transmission order;

-todistribute;

-the data units in;

-an order different from;

-the order in which they were received.

Considering claim 5, there is no support for:

-A method;

-for routing and;

-distributing data units;

-each of;

-said data units having;

-an identification portion and;

-an information content portion;
-said method using;
-a switch with multiple data ports;
-a plurality of storage locations;
-for storing and communicating each of;
-said data units to;
-a unique destination address and;
-a controller;
-for controlling;
-said switch and;
-said storage location;
-said method comprising;
-the steps of: receiving;
-the data units in;
-an information stream;
-said stream having;
-said data units separated in;
-the time domain so that;
-said data units are sequentially received by;
-said switch;
-processing;
-said data units by decoding;
-the identification portion of each of;
-said data units;
-toidentify;
-the priority of;
-the information content portion of;
-said data units routing each of;
-said data units to;
-a data port on;
-said switch;
-selecting;
-a Storage location;
-tostore each of;
-said data units and communicating each of;
-said data units to;
-said selected storage location;
-toprioritize;
-the transmission of each of;

-said data units.

Considering claim 6, there is no support for:
-The method of claim 5 further comprising:
-accumulating information about;
-said identification portion of;
-said data units;
-tocalculate;
-the total number of data units transmitted over;
-a predetermined time span;
-said calculated total about;
-said identification portion of;
-said data units being maintained;
-for each;
-said unique destination address, decoded in;
-said step of processing from;
-said identification portion, for;
-said data units passing through;
-said switch over;
-said predetermined time span.

Considering claim 7, there is no support for:
-The method of claim 6 further comprising: generating;
-a bill from;
-said total number of;
-said data units transmitted over;
-a predetermined time calculated in;
-said step of accumulating information by comparing;
-said accumulated total number of;
-said data units transmitted to;
-said unique destination address with;
-a predetermined billing rate.

Considering claim 8, there is no support for:
-The method of claim 5 further comprising: determining from;
-said decoded identification portion of;
-said data unit whether;
-said data units should be distributed;
-tomultiple data ports on;

-said switch.

Considering claim 9, there is no support for:
        -The method of claim 5 further comprising: comparing;
        -said decoded identification portion of;
        -said data units with;
        -a predetermined schedule;
        -todetermine;
        -a re-transmission time for;
        -said data units and determining;
        -a data port on;
        -said switch for;
        -said re-transmission.

Considering claim 10, there is no support for:
        -The method of claim 5 further comprising: accumulating information;
        -a 't;
        -said identification portion of;
        -said data units;
        -tocalculate;
        -the total number of data units transmitted over;
        -a predetermined time span;
        -said calculated total about;
        -said identification portion of;
        -said data units being;
        -maintained;
        -foreach data port on;
        -said switch for;
        -said data units passing through;
        -said switch over;
        -said predetermined time span.

Considering claim 11, there is no support for:
        -The method of claim 10 further comprising: generating;
        -a bill from;
        -said total number of data units transmitted over;
        -a predetermined time calculated in;
        -said step of accumulating;
        -information by;

-comparing;

-said accumulated total number of data units transmitted to;

-a data port with;

-a predetermined billing rate.

Considering claim 12, there is no support for:

-A method;

-forrouting and distributing data units, each of;

-said data units having;

-an identification portion and;

-an information content portion;

-said method using;

-a switch with multiple data ports;

-a plurality of storage locations;

-forstoring and communicating;

-said data units and;

-a controller;

-forcontrolling;

-said switch and;

-said storage location;

-said method comprising;

-the steps of: receiving;

-the data units in;

-an information stream;

-said stream having;

-said data units separated in;

-the time domain so that;

-said data units are sequentially received by;

-a switch;

-processing;

-said data units by decoding;

-the identification portion of each of;

-said data units;

-toidentify;

-the information content portion of;

-said data units comparing;

-the identification portion of;

-said data units;

-topredetermined timing data;

                    -todetermine;
                    -a transmission time based on;
                    -said identification portion of;
                    -said data units and transmitting;
                    -said data units based on;
                    -said comparing step.

Considering claim13, there is no support for:
                    -The method of claim 12 further comprising:;
                    -accumulating information about;
                    -said identification portion of;
                    -said data units;
                    -tocalculate;
                    -the total number of data units transmitted over;
                    -a predetermined time span;
                    -said calculated total about;
                    -said identification portion of;
                    -said data units being maintained;
                    -foreach;
                    -said unique destination address, decoded in;
                    -said step of processing from;
                    -said identification portion, for;
                    -said data units passing through;
                    -said switch over;
                    -said predetermined time span.

Considering claim 14, there is no support for:
                    -The method of claim 13 further comprising: generating;
                    -a bill from;
                    -said total number of data units transmitted over;
                    -a predetermined time calculated in;
                    -said step of accumulating information by comparing;
                    -said accumulated total number of data units transmitted to;
                    -said unique destination address with;
                    -a predetermined billing rate.

Considering claim 15, there is no support for:
                    -The method of claim 12 further comprising: determining from;
                    -said decoded identification portion of;

-said data units whether;
-said data units should be distributed;
-tomultiple data ports on;
-said switch.

Considering claim 16, there is no support for:
-The method of claim 12 further comprising: comparing;
-said decoded identification portion of;
-said data units with;
-a predetermined schedule;
-todetermine;
-a re-transmission time for;
-said data units and determining;
-a data port on;
-said switch for;
-said re-transmission.

Considering claim 17, there is no support for:
-A method;
-for routing and distributing data units, each of;
-said data units having;
-an identification portion and;
-an information content portion;
-said method using;
-a switch with multiple data ports;
-a plurality of storage locations;
-forstoring and communicating data units and;
-a controller;
-forcontrolling;
-said switch and;
-said storage location;
-said method comprising;
-the steps of:
-receiving;
-the data units in;
-an information stream;
-said stream having;
-said data units separated in;
-the time domain so that;

-said data units are sequentially received by;
-a switch;
-processing;
-said data units by decoding;
-the identification portion of each of;
-said data units;
-toidentify;
-the information content portion of;
-said data unit comparing;
-said decoded identification portion of each of;
-said data Units;
-topredetermined priority data;
-todetermine;
-a transmission priority;
-communicating;
-an instruct-to-delay signal;
-tocause;
-a delay in;
-the communication of;
-said data units.

Considering claim18, there is no support for:

-The method of claim 17 further comprising:;
-accumulating information about;
-said identification portion of;
-said data units;
-tocalculate;
-the total number of data units transmitted over;
-a predetermined time span;
-said calculated total about;
-said identification portion of;
-said data units being maintained;
-foreach;
-said unique destination address, decoded in;
-said step of processing from;
-said identification portion, for;
-said data units passing through;
-said switch over;
-said predetermined time span.

Considering claim 19, there is no support for:
>-The method of claim 18 further comprising: generating;
>-a bill from;
>-said total number of data units transmitted over;
>-a predetermined time calculated in;
>-said step of accumulating information by comparing;
>-said accumulated total number of data units transmitted to;
>-said unique destination address with;
>-a predetermined billing rate.

Considering claim 20, there is no support for:
>-The method of claim 17 further comprising:
>-determining from;
>-said decoded identification portion of;
>-said data units whether;
>-said data units should be distributed;
>-tomultiple data ports on;
>-said switch.

Considering claim 21, there is no support for:
>-The method of claim 17 further comprising: comparing;
>-said identification portion of;
>-said data units with;
>-a predetermined schedule;
>-todetermine;
>-a re-transmission time for;
>-said data units and determining;
>-a data port on;
>-said switch for;
>-said re-transmission.

Considering claim 22, there is no support for:
>-The method of claim 17 further comprising:;
>-accumulating information about;
>-said identification portion of;
>-said data units;
>-tocalculate;
>-the total number of data units, transmitted over;
>-a predetermined time span;

-said calculated total about;
-said identification portion of;
-said data units being maintained;
-foreach data port b-n,°aid switch for;
-said data units passing through;
-said switch over;
-said predetermined time span.

Considering claim 23, there is no support for:
-The method claim 22 further comprising:
-generating;
-a bi bit from;
-said total number of data units transmitted over a;
-predetermined time calculated in;
-said step of accumulating information by comparing;
-said accumulated total number of data units transmitted to;
-a data port with a;
-predetermined billing rate.

Considering claim 24, there is no support for:
-A method;
-forrouting and distributing data units;
-said data units having;
-a first identification portion and;
-a second multimedia information portion using;
-a switch with multiple data ports;
-a data buffer and;
-a controller;
-forcontrolling;
-said switch comprising;
-the steps of:
-receiving;
-the data units from;
-a multiple channel data stream;
-said multiple channel data stream having;
-said data units separated in;
-the time domain so that;
-said data units are sequentially received on;
-a data port on;

-said switch;
-processing;
-said data units by decoding;
-said first portion of;
-said data units;
-toidentify;
-the type of data in;
-said second multimedia information portion and;
-toidentify;
-a unique destination address that;
-indicates;
-routing information for;
-said data units assigning;
-a transmission priority to;
-said data units based on;
-said type of data in;
-said second multimedia portion of;
-said data units determined by;
-said step of processing;
-said data units by placing;
-said data units into;
-said data buffer and;
-transmitting;
-said data units based on;
-said assigned priority determined by;
-the type of data in;
-said second multimedia information portion of;
-said data units to;
-a data port on;
-said switch.

Considering claim 25, there is no support for:
-The method of claim 24 further comprising: accumulating information about;
-said identification portion of;
-said data units;
-tocalculate;
-the total number of data units transmitted over;
-a predetermined time span;
-said calculated total about;

-said identification portion of;
-said data units being maintained;
-foreach;
-said unique destination address, decoded in;
-said step of processing from;
-said identification portion, for;
-said data units passing through;
-said switch over;
-said predetermined time span.

Considering claim 26, there is no support for:

-The method of claim 25 further comprising: generating;
-a bill from;
-said total number of data units transmitted over;
-a predetermined time calculated in;
-said step of accumulating information by comparing;
-said accumulated total number of data units transmitted to;
-said unique destination address with;
-a predetermined billing rate.

Considering claim 27, there is no support for:

-The method of claim 24 further comprising: determining from;
-said decoded identification portion of;
-said data units whether;
-said data units should be distributed;
-tomultiple data ports on;
-said switch.

Considering claim 28, there is no support for:

-The method of claim 24 further comprising: comparing;
-said identification portion of;
-said data units with;
-a predetermined schedule;
-todetermine;
-a re-transmission time for;
-said data units and determining;
-a data port on;
-said switch for;
-said re-transmission.

Considering claim 29, there is no support for:
>-The method of claim 24 further comprising:;
>-comparing;
>-said identification portion of;
>-said data units with;
>-a predetermined schedule;
>-todetermine;
>-a re-transmission time for;
>-said data units and determining multiple data ports on;
>-said switch for;
>-said re-transmission.

Considering claim 30, there is no support for:
>-The method of claim 28 further comprising: verifying;
>-said re-transmission by receiving;
>-said re-transmitted data units from;
>-said selected data port on;
>-said switch and repeating;
>-said step of processing;
>-said data units;
>-toidentify;
>-the type of data in;
>-said second multimedia information portion and;
>-toidentify;
>-an address that indicated routing information for;
>-said data units.

Considering claim 31, there is no support for:
>-The method claim 28 further comprising:
>-receiving;
>-a new transmission schedule and changing;
>-said predetermined transmission schedule.

Considering claim 32, there is no support for:
>-The method of claim 24 further comprising:
>-receiving;
>-a billing rate schedule.

Considering claim 33, there is no support for:

-A method;
-forrouting and distributing multimedia data, said;
-multimedia data having;
-a first identification portion and;
-a second multimedia;
-information portion using;
-a network of switches;
-each with;
-multiple ports and a;
-controller;
-forcontrolling;
-said network of switches comprising;
-the steps of:
-receiving;
-the multimedia data at;
-an input on;
-a first switch;
-said multimedia data;
-having multimedia signal units separated in;
-the time domain so that;
-said multimedia;
-data is sequentially received;
-processing;
-said multimedia data units by decoding;
-a first encoded;
-portion of;
-said multimedia data units;
-todetermine;
-a destination address for;
-said multimedia data units;
-routing;
-said multimedia data units to;
-an output port on;
-said network of;
-switches based on;
-said processing step;
-storing;
-said multimedia data units in;
-a temporary storage location based;

-on;
-said routing step that was determined in;
-said processing step;
-transmitting;
-said multimedia data units from;
-said temporary storage;
-device at;
-an asynchronous time;
-said asynchronous time determined by decoding said;
-first encoded portion of;
-said multimedia data units;
-todetermine;
-the type of data;
-in;
-said second multimedia information;
-portion to;
-a second switch.

Considering claim34, there is no support for:
-The method of claim 33 further comprising:
-determining from;
-said decoded identification portion of;
-said data units whether;
-said data units should be distributed;
-tomultiple data ports on;
-said switch.

Considering claim 35, there is no support for:
-The method of claim 33 further comprising: comparing;
-said decoded identification portion of;
-said data units with;
-a predetermined schedule;
-todetermine;
-a re-transmission time for;
-said data units and determining;
-a data port on;
-said switch for;
-said re-transmission.

Considering claim 36, there is no support for:

    -The method of claim 33 further comprising: accumulating information about;

    -said identification of portion of;

    -said data units;

    -tocalculate;

    -the total number of data units transmitted over;

    -a predetermined time span;

    -said calculated total about;

    -said identification portion of;

    -said data units being maintained;

    -foreach data port on;

    -said switch for;

    -said data units passing through said;

    -said switch over;

    -said predetermined time span.

Considering claim37, there is no support for:

    -The method of claim 36 further comprising: generating;

    -a bit from;

    -said total number of data units transmitted over;

    -a predetermined time calculated in;

    -said step of accumulating information by;

    -comparing;

    -said accumulated: total number of data units;

    -transmitted to;

    -a data port with a;

    -predetermined billing rate.

Considering claim 38, there is no support for:

    -A method;

    -forcoding, decoding, routing and distributing multimedia data;

    -said multimedia data having;

    -a first identification portion and;

    -a second multimedia information portion using;

    -a multiple port switch and;

    -a controller;

    -comprising;

    -the steps of:

    -receiving multimedia data units from;

-a multiple channel data stream;
-said multiple channel data stream having multimedia data units separated in;
-the time domain so that;
-said multimedia data units have;
-an asynchronous arrival at;
-a data port on;
-said switch;
-processing;
-said multimedia data units by decoding;
-said first portion of;
-said multimedia data units;
-toidentify;
-the type of data in;
-said second multimedia information portion and;
-toidentify;
-a unique destination address that indicates routing information for;
-said multimedia data units storing;
-said multimedia signal in;
-a temporary storage location based on;
-said routing information determined in;
-said processing step;
-processing;
-said multimedia data units by decoding;
-said second portion of;
-said multimedia data units and re-formatting;
-said multimedia data from;
-said second portion of;
-said multimedia data units re-timing;
-said re-formatted multimedia data units into;
-a synchronous data stream.

Considering claim39, there is no support for:
-The method of claim 38 further comprising:;
-transmitting;
-said re-timed and;
-re-formatted;
-multimedia signal from;
-said storage in;
-a synchronous data stream;

-said synchronizing time determined by;
-the data port on;
-said switch selected by;
-said address decoded from;
-said first portion of;
-said multimedia data units in;
-said step of processing.

Considering claim 40, there is no support for:
-The method of claim 38 further comprising: transmitting;
-said re-timed and re-formatted multimedia signal from;
-said storage in;
-a synchronous data stream;
-said synchronizing time determined by comparing;
-said decoded multimedia identification portion of;
-said multimedia data units with predetermined data;
-todetermine;
-a re-transmission rate for;
-said multimedia signal.

Considering claim 41, there is no support for:
-The method of claim 38 further comprising: accumulating information from;
-said first identification portion of;
-said multimedia data units;
-tocalculate;
-the total number of multimedia data units transmitted over;
-a predetermined time span;
-said calculated total about;
-said identification portion of;
-said multimedia data units being maintained;
-foreach;
-said unique destination address, decoded in;
-said step of processing from;
-said identification portion, for;
-said multimedia data units passing through;
-said switch over;
-said predetermined time span.

Considering claim 42, there is no support for:

-The method of claim 41 further comprising: generating;
-a bill from;
-said total number of data units transmitted over;
-a predetermined time calculated in;
-said step of accumulating information by comparing;
-said accumulated total number of data units transmitted to;
-said unique destination address with;
-a predetermined billing rate.

Considering claim 43, there is no support for:
-The method of claim 38 further comprising: determining from;
-said decoded identification portion of;
-said multimedia data units whether;
-said multimedia data units should be distributed;
-tomultiple data ports on;
-said switch.

Considering claim 44, there is no support for:
-The method of claim 38 further comprising: comparing;
-said decoded identification portion of;
-said multimedia data units with;
-a predetermined schedule;
-todetermine;
-a re-transmission time for;
-said multimedia data units and determining;
-a data port on;
-said switch for;
-said re-transmission.

Considering claim 45, there is no support for:
-The method of claim 38 wherein;
-said multimedia information is analog audio.

Considering claim 46, there is no support for:
-The method of claim 38 wh wherein;
-said multimedia information is digital audio.

Considering claim 47, there is no support for:
-The method of claim 38 wherein;

-said multimedia information is analog;
-video.

Considering claim 48, there is no support for:
-The method of claim 38 wherein;
-said multimedia information is digital;
-video.

Considering claim 49, there is no support for:
-method of claim 38 wherein;
-said multimedia information is analog data.

Considering claim 50, there is no support for:
-The method of claim 38 wherein;
-said multimedia information is digital.

Considering claim 51, there is no support for:
-A method of processing signals at;
-a receiver station;
-said receiver station having;
-a computer capable of responding;
-tocommands and controlling;
-the communication of signals;
-said method comprising;
-the steps of:
-inputting and storing;
-a command;
-said command designating;
-at least;
-one of:
-(1) a signal;
-tobe;
-stored;
-said signal including;
-at least;
-one of television, radio, video, audio, data, and computer programming;
-(2) a time;
-tocommunicate;
-said signal;

-and;
-(3) a place;
-tocommunicate;
-said signal to;
-or;
-from;
-said place including;
-at least;
-one of;
-a transmitter, video monitor;
-a speaker;
-a computer;
-a processor;
-a controller;
-a storage device, and;
-a subscriber station;
-receiving;
-said signal;
-storing;
-said signal at;
-a first storage location;
-said first storage location being capable of being commanded;
-tostore and output;
-said signal;
-and outputting;
-said signal from;
-said first storage location to;
-a second storage location in accordance with;
-said command;
-storing;
-said signal at;
-said second storage location;
-said second storage location being capable of being commanded;
-tostore and output;
-said signal;
-and communicating;
-said signal from;
-said second storage location.

Considering claim 52, there is no support for:

- A method of processing signals at;
- a receiver station;
- said receiver station having;
- a receiver;
- forreceiving;
- a transmission, and;
- a plurality of storage locations, each storage location capable of being commanded;
- tostore and output programming;
- said receiver station capable of selecting between each of;
- said plurality of storage locations and communicating;
- said programming between each of;
- said plurality of storage locations;
- said method comprising;
- the steps of: receiving;
- an information transmission including;
- programming comprising;
- at least;
- one of television,;
- radio, video,;
- audio, data, and;
- computer programming;
- demodulating;
- said information transmission;
- detecting;
- said programming embedded in;
- said information transmission;
- storing;
- said programming at;
- a first storage location;
- transferring;
- said programming stored at;
- said first location to;
- a second location in response to;
- a command;
- storing;
- said programming at;
- said second storage location;

-toenable;
-said receiver station;
-totransfer;
-said programming from;
-said second storage location to;
-a computer at;
-a specific time;
-or;
-in response to;
-said command.

Considering claim 53, there is no support for:
-The method of claim 52 further comprising;
-the steps of: storing programming storage information indicating that;
-said programming is stored in;
-said first storage location;
-and updating;
-said programming storage information when;
-said programming has been transferred to;
-said second storage location.

Considering claim 54, there is no support for:
-The method of claim 52 further comprising;
-the step of embedding in;
-said programming;
-an identification signal identifying;
-said programming, and;
-said steps of storing including storing;
-said programming;
-with said embedded identification signal.

Considering claim 55, there is no support for:
-The method of claim 54 further comprising;
-the steps of: communicating;
-said programming and;
-said embedded identification signal from;
-said second storage location to;
-said output device;
-detecting;

-said identification signal in;
-said programming;
-and recording information indicating that;
-said programming was communicated.

Considering claim56, there is no support for:
-The method of claim 52 further comprising;
-the step of receiving and identifying;
-a signal instructing;
-said receiver station;
-tocommunicate;
-said programming to;
-an output device.

Considering claim 57, there is no support for:
-The method of claim 56 further comprising;
-the step of;
-communicating, in response to;
-said signal;
-said programming from;
-said second;
-storage location to;
-said output device.

Considering claim 58, there is no support for:
-The method of claim 52 further comprising;
-the steps of: receiving;
-a programming schedule designating;
-the time and channel;
-forcommunicating;
-said programming;
-and communicating;
-said programming from second storage location to;
-said output device in accordance with;
-said programming schedule.

Considering claim 59, there is no support for:
-A method of communicating signals in;
-a network;

-said network including;
-an origination station;
-at least;
-one intermediate station that receives and transmits;
-said signals, and;
-at least;
-one subscriber station;
-said method comprising;
-the steps of: storing television programming at;
-a first storage location;
-said television programming, including video and audio;
-transferring, under computer control;
-said television programming from;
-said first storage location to;
-a second storage location at;
-a selected one of;
-said;
-at least;
-one intermediate station;
-storing;
-said television programming at;
-said second storage location;
-toenable;
-said selected intermediate station;
-tocommunicate;
-said television programming from;
-said second storage location to;
-a selected one of;
-said;
-at least;
-one subscriber station;
-communicating;
-a programming identification signal from;
-said origination station to;
-said selected intermediate station;
-said programming identification;
-si-signal identifying;
-said television programming stored at;
-said second storage location;

-detecting, at;
-said selected intermediate station;
-said programming identification signal;
-communicated from;
-said origination station;
-and communicating;
-said television programming from;
-said second storage location to;
-said selected subscriber station based on;
-said programming identification signal.

Considering claim60, there is no support for:
-A method of communicating signals in;
-a network;
-said network including;
-an origination station;
-at least;
-one intermediate station that receives and retransmits;
-said signals, and;
-a plurality of subscriber stations that receive;
-said signals;
-said method comprising;
-the steps of: storing television programming at;
-a first storage location at;
-a first intermediate station;
-said first intermediate station being one of;
-said;
-at least;
-one intermediate station in;
-said network;
-transferring, under computer control;
-said television programming from;
-said first storage location to;
-a second storage location at;
-a second intermediate station;
-said second intermediate station being one of;
-said;
-at least;
-one intermediate station in;

-said network;
-storing;
-said television programming at;
-said second storage location;
-toenable;
-the communication of;
-said television programming from;
-said second intermediate station to;
-at least;
-one of;
-said plurality of subscriber stations.

Considering claim 61, there is no support for:
-The method of claim 60 further comprising;
-the steps of:
-communicating;
-a programming identification signal from;
-said origination station to;
-said first intermediate station;
-said programming identification signal identifying;
-said television programming;
-detecting, at one of;
-said plurality of intermediate stations;
-said programming identification signal communicated from;
-said origination station;
-communicating;
-said television programming from;
-said second storage location to;
-at least;
-one of;
-said plurality of subscriber stations in response;
-todetecting;
-said programming identification signal.

Considering claim62, there is no support for:
-The method of claim 61 further comprising;
-the step of verifying that;
-said television programming was communicated from;
-said second storage location.

Considering claim 63, there is no support for:

   -The method of claim 60 wherein;
   -said step of storing;
   -said television programming;
   -at second storage location further comprises;
   -the steps of: identifying;
   -said television programming;
   -embedding identification data in;
   -said television programming;
   -said identification data identifying;
   -said television programming;
   -storing;
   -said television programming with;
   -said embedded identification data at;
   -said second storage location;
   -toenable;
   -the communication of;
   -said television programming from;
   -said second intermediate station to;
   -at least;
   -one of;
   -said plurality of subscriber stations.

Considering claim 64, there is no support for:

   -The method of claim 63 further comprising: detecting;
   -said embedded;
   -identification data in;
   -said television programming;
   -and;
   -storing information indicating that;
   -said television programming was communicated based on;
   -said step of detecting.

Considering claim65, there is no support for:

   -The method of claim 60 wherein;
   -said step of storing;
   -said television programming at;
   -said first storage location further comprises storing;
   -a first television programming and;

-a second television programming on;
-a first storage device;
-said step of storing;
-said television programming at;
-said second storage location further comprises:
-(a) sorting;
-said first television programming and;
-said second television programming into;
-a specific order;
-and (b) storing;
-said first television programming and;
-said second television programming on;
-said second storage device in;
-said specific order.

Considering claim 66, there is no support for:
-A method of processing signals at;
-a receiver station comprising;
-the steps of: receiving one of;
-a broadcast and cablecast transmission;
-demodulating;
-said one of;
-a broadcast and cablecast transmission;
-said one of;
-a broadcast and cablecast transmission including;
-an embedded signal;
-detecting;
-said embedded signal on;
-said one of;
-a broadcast and cablecast transmission;
-selecting information stored at;
-a first storage location in response to;
-said embedded signal;
-transferring;
-said information from;
-said first storage location to;
-a second storage location based on;
-said embedded signal, thereby providing;
-a computer access to;

-said information;
-said first storage location and;
-said second storage location being capable of being commanded;
-tostore and output programming.

Considering claim 67, there is no support for:
-The method of claim 66, wherein;
-said information includes one of television and radio programming, and wherein;
-said step of selecting;
-said information includes selecting;
-said one of television and radio programming stored at;
-said first storage location in response to;
-said embedded signal;
-and wherein;
-said step of transferring;
-said information includes transferring,;
-under computer control;
-said selected one of television and;
-radio programming from;
-said first storage location to;
-said second storage location, and;
-said method further comprising;
-the step of: communicating,;
-under computer control;
-said one of television and radio programming;
-stored at;
-said second storage location to;
-an output device in response to;
-a second embedded signal on;
-said one of;
-a broadcast and cablecast transmission.

Considering claim 68, there is no support for:
-A method of controlling;
-the communication of television programming at;
-a transmission station, where;
-said television programming includes video and audio;
-said transmission station having;
-at least;

-one storage device;
-forstoring;
-said television programming, transferring means;
-fortransferring;
-said television programming within;
-said transmission station from;
-a first storage location to;
-a second storage location, and;
-a computer;
-forcontrolling;
-said transferring means and identifying;
-said television programming on;
-the basis of identification information associated with;
-said television programming;
-said method comprising;
-the steps of: inputting schedule information that specifies;
-said television programming, and;
-at least;
-one of: (a);
-a time;
-tocommunicate;
-said television programming;
-and (b);
-a place;
-tocommunicate;
-said television programming to;
-transferring;
-said television programming from;
-said first storage location to;
-said second storage location thereby enabling;
-said transmission station;
-tocommunicate;
-said television programming from;
-said second storage location to;
-a receiver station in accordance with;
-said schedule information.

Considering claim69, there is no support for:
        -The method of claim 68, wherein;

-said first storage location and second storage location are s;
-eparate storage locations on;
-a storage device;
-said step of transferring;
-said television programming further comprising;
-transferring location information of;
-said television programming from;
-said first storage location to;
-said second storage location.

Considering claim 70, there is no support for:
-The method of claim 68 wherein;
-said schedule information further specifies;
-an output channel on which;
-tocommunicate;
-said television programming.

Considering claim 71, there is no support for:
-The method of claim 68, wherein;
-said first storage location is at;
-a first storage device;
-said second storage location is at;
-a second storage device, and;
-said transferring means is;
-a matrix switch, and wherein;
-said step of transferring further includes: configuring;
-said matrix switch;
-toconnect;
-said first storage device to;
-said second storage device;
-said first storage device being connected to;
-an input to;
-said matrix switch, and;
-said second storage device being connected to;
-an output of;
-said matrix switch;
-outputting;
-said television programming stored at;
-said first storage device to;

-the input of;
-said matrix switch;
-inputting;
-said television programming to;
-said second storage device from;
-said matrix switch;
-and storing;
-said television programming at;
-said second storage device.

Considering claim72, there is no support for:
-A transmission station apparatus;
-forcommunicating programming;
-said apparatus comprising:
-a receiver;
-forreceiving;
-an information transmission;
-said information transmission including;
-said programming;
-a first storage device connected to;
-said receiver;
-forstoring;
-said programming;
-a second storage device connected to;
-said first storage device;
-said second storage device storing;
-said programming output by;
-said first storage device;
-a switch connected to;
-said first storage device and;
-said second storage device;
-a computer connected to;
-said first storage device;
-said second storage device, and;
-said switch;
-forcontrolling;
-said first storage device;
-tooutput;
-said programming to;

-said second storage device and controlling;
-said second storage device;
-tooutput;
-said programming to;
-said switch;
-said computer being capable of:
-(1) selecting;
-a storage device;
-tostore;
-said programming;
-(2) commanding;
-said switch;
-totransfer;
-said programming to;
-said selected storage device;
-and;
-(3) commanding;
-said selected storage device;
-tostore;
-said programming;
-and;
-a cable network connected to;
-said switch;
-forreceiving;
-said programming output from;
-said second storage device and communicating;
-said programming to;
-a plurality of subscriber stations.

Considering claim73, there is no support for:
-The apparatus of claim 72, further comprising:
-a signal encoder connected to;
-said computer;
-forencoding;
-an identification signal on;
-said programming;
-a channel modulator connected to;
-said switch and to;
-said cable network;

-said channel modulator modulating;
-said programming output by;
-said second storage device through;
-said switch;
-said cable network communicating;
-said modulated programming to;
-said subscriber;
-and;
-a verification circuit connected to;
-at least;
-one of;
-said switch;
-said cable network, and;
-said channel modulator;
-forverifying;
-at least;
-one of;
-the time,;
-channel, and;
-frequency of transmission of;
-said programming;
-said verification circuit comprising;
-a signal decoder;
-fordecoding;
-said encoded identification signal.

Considering claim 74, there is no support for:
-An apparatus;
-forcontrolling;
-the communication of television programming at;
-a transmission station comprising:
-a first storage device;
-forstoring;
-said television programming;
-a second storage device;
-forstoring;
-said television programming;
-a configurable switch connecting;
-said first storage device to;

-said second storage device;
-a modulator connected to;
-said second storage device;
-forcommunicating;
-said television programming;
-tosubscribers;
-and;
-a computer connected to;
-said first storage device;
-said second storage device, and;
-said configurable switch;
-said computer having;
-a memory and being programmed;
-toperform;
-the following steps:
-(a) receiving and storing;
-a programming schedule;
-said programming schedule designating;
-said television programming;
-a time;
-tocommunicate;
-said television programming, and one of;
-a communication channel and frequency;
-forcommunicating;
-said television programming;
-(b) controlling;
-said first storage device;
-toreceive and store;
-said television programming;
-(c) controlling;
-said configurable switch and;
-said first storage device;
-totransfer;
-said television programming from;
-said first storage device to;
-said second storage device;
-(d) controlling;
-said second storage device;
-tostore;

-said television programming;
-and;
-(e) controlling;
-said second storage device and;
-said modulator;
-tocommunicate;
-said television programming from;
-said second storage device to;
-said subscribers according to;
-said programming schedule.

Considering claim75, there is no support for:
-A method of communicating subscriber station information from;
-a subscriber station to;
-at least;
-one remote collection station;
-said method comprising;
-the steps of:
-(1) inputting;
-an instruct signal which is effective at;
-said subscriber station;
-tooutput;
-a signal from;
-a first storage location and store;
-said signal at;
-a second storage location;
-(2) detecting;
-the presence of;
-an instruction associated with;
-said instruct signal;
-said instruction being effective at;
-said subscriber station;
-togenerate subscriber station specific data and;
-toselect and assemble;
-said subscriber station specific data into;
-a record;
-(3) processing at;
-said subscriber station inputted data and performing, in response to;
-said instruction, one of:

-(a) generating subscriber station specific data and;
-communicating;
-said subscriber station specific data to;
-a transmitter;
-and;
-(b) selecting and assembling into;
-said record;
-said subscriber;
-station specific data and communicating;
-said record to;
-a transmitter;
-and;
-(4) transmitting;
-said record to;
-said;
-at least;
-one remote collection station.

Considering claim 76, there is no support for:
-A method of gathering information on;
-the use of;
-a signal at;
-a receiver station;
-said receiver station having;
-a processor, and;
-a controlled device;
-said receiver station transferring;
-said information to;
-a remote station;
-said method comprising;
-the steps of:
-(1) identifying;
-at least;
-one of;
-a device and;
-a control signal which operates;
-tooutput;
-a signal from;
-a first storage location and store;

-said signal at;
-a second storage location;
-(2) monitoring;
-said;
-at least;
-one of;
-a device and;
-a control signal;
-(3) storing;
-a record of;
-the use of;
-said;
-at least;
-one of;
-a device and;
-a control signal;
-and;
-(4) communicating;
-said information from;
-said record from;
-said receiver station to;
-said remote station.

Considering claim 77, there is no support for:
-A method of controlling;
-a network comprising;
-at least;
-one remote intermediate transmitter station and;
-at least;
-one receiver station, with;
-said;
-at least;
-one remote intermediate transmitter station including;
-a transmitter;
-fortransmitting data;
-a plurality of selective transfer devices;
-each;
-operatively connected to;
-said transmitter;

-a data receiver;
-forreceiving data from;
-at least;
-one origination transmitter station;
-a control signal detector, and;
-a computer capable of controlling;
-said plurality of selective transfer devices, and with;
-said;
-at least;
-one remote intermediate transmitter station adapted;
-todetect;
-a control signal;
-tocontrol;
-the communication of;
-said data in response to;
-said control signal, and;
-todeliver;
-said data to;
-said transmitter;
-said method comprising;
-the steps of:
-(1) receiving at;
-said;
-at least;
-one origination transmitter station;
-said data;
-tobe transmitted by;
-said;
-at least;
-one remote intermediate transmitter station and delivering;
-said data to;
-said;
-at least;
-one origination transmitter;
-said data comprising;
-an instruct signal which is effective in;
-said network;
-tooutput;
-a signal from;

-a first storage location and store;
-said signal at;
-a second storage location;
-(2) receiving;
-said control signal which operates at;
-said;
-at least;
-one remote intermediate transmitter station;
-tocontrol;
-the communication of;
-said data;
-and;
-(3) transmitting;
-said control signal to;
-said;
-at least;
-one origination;
-transmitter before;
-a specific time.

Considering claim 78, there is no support for:
-A method of controlling;
-a plurality of receiver stations each of which includes;
-a data receiver;
-a signal detector;
-at least;
-one computer, and with each of;
-said plurality of receiver stations adapted;
-todetect;
-the presence of;
-a control signal and;
-toinput;
-a viewer reaction to;
-an offer communicated in;
-a mass medium program;
-said method of controlling comprising;
-the steps of:
-(1) receiving;
-a first code at;

-a transmitter station;
-said first code designates one of;
-a product;
-or;
-service offered in;
-a mass medium program and;
-a viewer reaction to;
-an offer communicated in;
-a mass medium program;
-(2) receiving;
-a second code at;
-said transmitter station, wherein;
-said second code operates at;
-said plurality of receiver stations;
-tooutput;
-a signal from;
-a first storage location and store;
-said signal at;
-a second storage location;
-(3) transferring;
-said first code and;
-said second code to;
-a transmitter at;
-said transmitter station;
-and;
-(4) transmitting;
-said first code and;
-said second code.

Considering claim79, there is no support for:
-A method of communicating data and update material to;
-at least;
-one of;
-a plurality of receiver stations, each of which includes;
-a data receiver;
-a data storage device;
-a control signal detector;
-a computer capable of processing data, with each of;
-said plurality of receiver station adapted;

-todetect and respond to;
-an instruct signal and;
-tostore data;
-forsubsequent processing;
-said method comprising;
-the steps of:
-(1) receiving data;
-tobe transmitted and delivering;
-said data to;
-a transmitter;
-(2) receiving;
-an instruct signal which operates at;
-at least;
-one of;
-said plurality of receiver stations;
-tooutput;
-a signal from;
-a first storage location and store;
-said signal at;
-a second storage location;
-(3) transferring;
-said instruct signal to;
-said transmitter;
-and;
-(4) transmitting;
-an information transmission comprising;
-said data and;
-said instruct signal.

Considering claim 80, there is no support for:
-An interactive method;
-fordata promotion and delivery;
-foruse with;
-an interactive mass medium program output apparatus comprising;
-the steps of:
-outputting;
-a mass medium program that promotes data;
-said interactive mass medium program output apparatus having;
-an input device;

-toreceive input from;
-a subscriber;
-prompting;
-said subscriber during;
-said mass medium program whether;
-said subscriber wants;
-said data promoted in;
-said step of outputting;
-said interactive mass medium program output apparatus having;
-a memory;
-forstoring code;
-receiving;
-a reply from;
-said subscriber at;
-said input device in response to;
-said step of prompting;
-said interactive mass medium program output apparatus having;
-a processor;
-forprocessing;
-said subscriber reply and;
-said data;
-processing;
-said reply and selecting code designating;
-said data;
-said interactive mass medium program output apparatus having;
-a transmitter;
-forcommunicating information to;
-a remote station;
-communicating;
-said selected code to;
-said remote station;
-said interactive mass medium output apparatus and;
-said remote station comprising;
-a network having;
-a plurality of transmitter stations;
-assembling, in;
-said network;
-a signal which is effective at;
-said interactive mass medium program output apparatus;

-tostore;
-said data at;
-said memory;
-said interactive mass medium program output apparatus having;
-a receiver;
-forreceiving at least;
-a portion of;
-said signal from;
-said remote station;
-delivering at least;
-a portion of;
-said signal at;
-said interactive mass medium program output apparatus;
-and delivering;
-said data on;
-the basis of;
-said signal.

Considering claim 81, there is no support for:
-The method of claim 80, wherein;
-said signal is embedded in;
-the non-visible portion of;
-a television signal.

Considering claim 82, there is no support for:
-The method of claim 80, wherein;
-evidence;
-information;
-evidencing;
-one;
-of;
-the availability,;
-use and;
-usage of;
-said mass medium program and;
-said data is stored and communicated to;
-a remote data collection station;
-said method further comprising;
-the step of selecting;

-said evidence information that identifies;

-at least;

-one of:

-(1) a mass medium program;

-(2) a use of data;

-(3) a transmission station;

-(4)a receiver station;

-(5) a network;

-(6) a broadcast station;

-(7) a channel on;

-a cable system;

-(8) a time of transmission;

-(9) a unique identifier datum;

-(10) a source;

-or;

-supplier of data;

-(11)a distributor;

-or;

-advertisement and;

-(12) an indication of copyright.

Considering claim 83, there is no support for:

-The method of claim 80, wherein;

-said signal incorporates executable code;

-said method further comprising;

-the steps of communicating;

-said code to;

-said processor and performing, on;

-the basis of;

-said code, one of:

-(1) receiving;

-a signal containing;

-said data;

-(2) actuating one of;

-a video, audio, and print storage;

-or;

-output device, as appropriate;

-tostore;

-or;

-output;
-said data;
-(3) decrypting at least;
-a portion of;
-said data;
-(4) controlling;
-a selective transfer device;
-tocommunicate;
-said data to;
-a storage device;
-or;
-an output device;
-(5) generating;
-a receiver specific datum on;
-the basis of;
-said data;
-(6) delivering;
-a mass medium program at;
-said interactive mass medium program output apparatus simultaneously with;
-said data, and;
-(7) delivering;
-a mass medium program at;
-said interactive mass medium program output apparatus sequentially with;
-said data.

Considering claim 84, there is no support for:
-A method of controlling;
-a receiver station;
-said receiver station having;
-a processor performing;
-a first function;
-said method comprising;
-the steps of: detecting one of;
-the presence and absence of;
-a first control signal;
-inputting;
-an instruct-to-react signal to;
-said processor based on;
-said step of detecting;

-controlling;
-said processor;
-toperform;
-a second function and;
-tooutput information in response to;
-said step of inputting;
-and selecting data and generating;
-a second control signal based on;
-said step of controlling;
-said second control signal being effective;
-tocommunicate;
-said selected data to;
-a storage device on;
-the basis of;
-said information.

Considering claim85, there is no support for:
-The method of claim 84, wherein;
-a buffer is connected to;
-said processor;
-forbuffering input;
-said method further comprising;
-the step of: inputting;
-said instruct-to-react signal directly to;
-said processor.

Considering claim 86, there is no support for:
-The method of claim 84, wherein;
-said processor processes;
-a datum designating one of;
-a television channel and;
-a television program;
-said method further including one of: controlling;
-a tuner;
-totune;
-a receiver;
-toreceive;
-said one of;
-a television channel and television program;

-controlling;
-a selective transfer device;
-toinput to;
-a control signal detector;
-said one of;
-a television channel and television program;
-controlling;
-said control signal detector;
-tosearch;
-forcontrol signals in;
-said one of;
-a television channel and television program;
-controlling;
-said selective transfer device;
-toinput to;
-a computer;
-said control signals detected in;
-said one of;
-a television channel and television program;
-controlling;
-said computer;
-torespond to;
-said control signals detected in;
-said one of;
-a television channel and television program;
-controlling;
-a television monitor;
-todisplay video and audio contained in;
-said one of;
-a television channel and television program;
-controlling;
-a video recorder;
-torecord;
-or;
-play video and audio contained in;
-said one of;
-a television channel and television program;
-and controlling;
-said selective transfer device;

> -tocommunicate;
> -toone of;
> -a video recorder;
> -or;
> -a television monitor;
> -said one of;
> -a television channel and television program.

Considering claim87, there is no support for:

> -The method of claim 84, wherein;
> -said processor processes;
> -a datum designating;
> -a specific channel of;
> -a multichannel signal;
> -said method further including one of: controlling;
> -a tuner;
> -totune;
> -a converter;
> -toreceive;
> -said specific channel;
> -controlling;
> -a selective transfer device;
> -toinput;
> -a control signal detector;
> -said specific channel;
> -controlling;
> -said control signal detector;
> -tosearch;
> -forcontrol signals in;
> -said specific channel controlling;
> -a selective transfer device;
> -toinput to;
> -a computer;
> -said control signals detected in;
> -said specific channel;
> -controlling;
> -a computer;
> -torespond to;
> -said control signals detected in;

    -said specific channel controlling;
    -a television monitor;
    -todisplay video and audio contained in;
    -said specific channel;
    -controlling;
    -a video recorder;
    -torecord;
    -or;
    -play video and audio contained in;
    -said specific channel;
    -and controlling;
    -a selective transfer device;
    -tocommunicate to;
    -at least;
    -one of;
    -a storage device and;
    -an output device;
    -said specific channel.

Considering claim 88, there is no support for:
    -A method;
    -foridentifying television programming in one of;
    -a broadcast and cablecast transmission station that has;
    -a storage device having;
    -(i) at least;
    -two storage locations;
    -each;
    -capable of;
    -storing;
    -a television signal, and;
    -(ii) a control device capable of controlling;
    -said storage device and identifying;
    -said television programming on;
    -the basis of identification information stored at;
    -said storage device;
    -said method comprising;
    -the steps of: inputting identification information that identifies;
    -said television programming;
    -inputting;

-said television signal to;
-said storage device;
-storing;
-said television programming at;
-a selected one of;
-said at least two storage locations;
-and storing;
-said identification information with;
-said television programming at;
-said selected location;
-and identifying;
-said television programming on;
-the basis of identification information associated in storage with;
-said television programming.

Considering claim89, there is no support for:
-The method of claim 88 further comprising;
-storing information that;
-identifies;
-the location where;
-the unit is stored.

Considering claim 90, there is no support for:
-A method;
-foridentifying television programming in;
-a broadcast and cablecast transmission station that has;
-storage means having;
-a first and;
-a second storage location, wherein;
-said storage means is capable of holding;
-at least;
-two units of;
-said television programming, and control means;
-capable of controlling;
-said storage means and;
-foridentifying;
-a selected unit of television programming on;
-the basis of identification information associated with;
-said selected unit;

-said method comprising;
-the steps of: inputting identification information that specifies;
-a unit of;
-said television programming;
-inputting;
-said unit of;
-said television programming associated with;
-said inputted identification information;
-identifying;
-the unit of;
-said television programming;
-storing;
-said unit at;
-said first storage location;
-and storing;
-said identification information at;
-said second storage location, thereby;
-toenable;
-said station;
-toidentify;
-said unit stored in;
-the first storage location on;
-the basis of identification information stored in;
-said second storage location.

Considering claim 91, there is no support for:
-A method;
-foridentifying and one of broadcasting and cablecasting television programming
at;
-a television transmission station;
-said transmission station capable of;
-storing and;
-transmitting;
-a television transmission;
-said television transmission comprising;
-units of television programming and;
-identification information identifying;
-said units of;
-said television programming;

-said method comprising;
-the steps of:
-inputting schedule information that i;
-dentifies one of;
-a category and;
-a unit of;
-said television programming;
-inputting;
-said television transmission;
-locating identification information in;
-said transmission that identifies;
-said one of;
-said category and;
-said unit of;
-said television programming;
-storing;
-said television transmission at;
-a first storage device;
-a determining that;
-said identification information identifies;
-said one of;
-said category and;
-said unit of;
-said television programming;
-transferring information of;
-said television programming transmission to;
-a second storage device;
-and storing;
-said information of;
-said television programming at;
-said second storage device, thereby enabling;
-said station;
-tobroadcast and/or cablecast television programming of;
-said one of;
-said category and;
-said unit of;
-said television programming.

Considering claim 92, there is no support for:

-The method of claim 91, wherein;
-said television transmission comprises;
-said unit of;
-said television programming and;
-unit identification information that;
-identifies;
-the unit;
-said step of transferring comprising;
-the steps of: transferring;
-the unit of programming and;
-the unit identification information of;
-the television transmission to;
-a second storage device;
-and;
-said step of storing comprises;
-the step of storing;
-the unit of programming with;
-said unit identification information in;
-the second storage device, thereby enabling;
-a computer at;
-the television transmission station;
-tolater locate and identify;
-the stored unit of programming based upon;
-said stored identification information.

Considering claim93, there is no support for:
-The method of claim 92;
-said schedule information designating one of;
-an output channel and;
-a time;
-forcommunicating;
-said unit of programming;
-said method further comprising;
-the steps of: identifying;
-the unit of programming stored in;
-said second storage device based on unit identification information;
-one of broadcasting and cablecasting;
-the unit of programming on one of;
-the output channel and at;

-the time designated by;
-the schedule information.

Considering claim 94, there is no support for:
-The method of claim 93 further comprising;
-the step of detecting and identifying;
-the unit of programming being one of cablecast and broadcast by;
-detecting and;
-identifying;
-the unit identification information in;
-the television transmission being;
-one of broadcast and cablecast.

Considering claim 95, there is no support for:
-The method of claim 94 further comprising making;
-a record indicating that;
-the unit of programming was one of broadcast and cablecast.

Considering claim96, there is no support for:
-The method of claim 92, wherein;
-said step of locating comprises;
-the step of detecting;
-the unit identification information in;
-the television transmission during;
-said step of transferring;
-the television transmission from;
-the first storage device to;
-the second storage device.

Considering claim 97, there is no support for:
-The method of claim 91 wherein;
-said step of transferring comprises;
-the step of transferring;
-the unit of programming from;
-the first storage device to;
-said second storage device, and;
-said step of storing comprises storing;
-the unit of programming at;
-said second storage device.

Considering claim 98, there is no support for:

-The method of claim 91 wherein;

-said step of transferring comprises;

-the step of transferring;

-the unit identification information from;

-the first storage device to;

-the second storage device, and;

-said step of storing comprises;

-the step of storing;

-the unit identification information at;

-said second storage device.

Considering claim99, there is no support for:

-The method of claim 91, wherein;

-said step of locating comprises;

-the step of:

-detecting;

-the unit identification information in;

-the television transmission prior;

-tostorage of;

-the television transmission at;

-the first storage device.

Considering claim 100, there is no support for:

-A method of communicating subscriber station information from;

-a subscriber station to;

-at least;

-one remote collection station;

-said method comprising;

-the steps of:

-(1) inputting;

-an instruct signal which is effective at;

-said subscriber station;

-toselect and control communication of;

-a datum which identifies information contained in;

-a program;

-(2) detecting;

-the presence of;

-at least;

-one of;
-an instruction, code and datum, associated with;
-said instruct signal, which is effective at;
-the subscriber station;
-toone of generate subscriber station specific data and;
-toselect and assemble;
-a plurality of specific and;
-subscriber station specific data into;
-a record;
-(3) processing at;
-the subscriber station inputted data and;
-performing,;
-in response to;
-said detected instruction, one of:
-(a) generating;
-said subscriber station specific data and;
-communicating;
-said generated subscriber station specific data to;
-a transmitter;
-and;
-(b) selecting and assembling into;
-said record;
-a specific plurality of;
-said subscriber specific data and communicating;
-said record and;
-said selected specific plurality of;
-said subscriber specific data to;
-a transmitter;
-and;
-(4) transmitting one of;
-said communicated generated subscriber station specific data and;
-said communicated record and specific plurality of;
-said subscriber specific data to;
-said;
-at least;
-one remote collection station.

Considering claim 101, there is no support for:
-A method of processing signals at;

-a receiver station comprising;
-the steps of:
-(1) receiving information transmissions;
-(2) detecting;
-a plurality of signals in;
-at least;
-one of;
-said information transmissions;
-at least;
-one of;
-said detected plurality of signals being effective at;
-said receiver station;
-toinstruct;
-(3) passing each detected instruct signal to;
-a computer;
-(4) controlling;
-said computer on;
-the basis of each detected and passed instruct signal;
-(5) selecting and controlling communication,;
-under computer control and;
-in response;
-toat least;
-a first of;
-said each detected and;
-passed instruct;
-signal, of;
-a datum that identifies information contained in;
-a program;
-and;
-(6) storing information evidencing;
-the passing of at least;
-a second of;
-said each detected and passed instruct signal.

Considering claim102, there is no support for:
-The method of claim 101, further comprising one of;
-the steps of: generating;
-a signal;
-tocontrol;

-a tuner;
-toreceive;
-a television program in response to;
-at least;
-one of;
-said detected and passed instruct signal;
-displaying;
-a television program at;
-a television monitor;
-inputting;
-said information transmissions to;
-a control signal detector in response to;
-a command;
-storing;
-a television program at one of;
-a memory and recorder;
-detecting and storing information evidencing;
-a function performed by;
-said computer in response to;
-at least;
-one of;
-said detected and passed instruct signal;
-and;
-assembling;
-a record of;
-at least;
-one of availability, use and usage of;
-a television program;
-logging;
-the transmission of;
-a television program to;
-said receiver station;
-and transmitting stored evidence information to;
-a remote data collection station.

Considering claim 103, there is no support for:
-A method of controlling;
-a remote intermediate mass medium program transmitter station;
-tocommunicate mass medium program material to;

-a remote receiver station and controlling;
-said remote receiver station;
-todeliver;
-an individualized mass medium program presentation;
-said method of controlling comprising;
-the steps of:
-(1) receiving mass medium programming;
-tobe transmitted by;
-the remote intermediate mass medium transmitter station and delivering;
-said mass medium programming to;
-a transmitter;
-(2) receiving;
-at least;
-one instruct signal at;
-said remote intermediate mass medium transmitter station;
-said;
-at least;
-one instruct signal operates at;
-the remote receiver station;
-toselect and control communication of;
-a datum which identifies information contained in;
-said mass medium programming, and communicating;
-said;
-at least;
-one instruct signal to;
-said transmitter;
-(3) receiving;
-at least;
-one control signal at;
-said remote intermediate mass medium transmitter station;
-said;
-at least;
-one control signal operates at;
-the remote intermediate mass medium transmitter station;
-tocontrol communication of one of;
-said mass medium programming and;
-said;
-at least;
-one instruct signal;

-and;
-(4) transmitting from;
-said remote intermediate mass medium transmitter section;
-an information transmission comprising;
-said mass medium programming and;
-said;
-at least;
-one instruct signal;
-said mass medium programming and;
-said;
-at least;
-one instruct signal transmitted in accordance with;
-said;
-at least;
-one control signal.

Considering claim 104, there is no support for:
-A method of controlling;
-a remote transmitter station;
-todeliver;
-a receiver specific mass medium program presentation at;
-a receiver station;
-said method of communicating comprising;
-the steps of:
-(1) receiving;
-a mass medium program at;
-the remote transmitter station and delivering;
-said mass medium program to;
-a transmitter;
-(2) receiving at;
-said remote transmitter station;
-at least;
-one instruct signal which operates;
-toselect and control communication of one of;
-a code and datum which;
-identifies information contained in;
-said mass medium program;
-(3) receiving;
-a control signal which operates at;

-the remote transmitter station;
-tocontrol;
-the communication of;
-at least;
-one instruct signal and communicating;
-said control signal to;
-said remote transmitter station;
-(4) receiving one of;
-said code and;
-said datum designating;
-a specific instruct signal of;
-said;
-at least;
-one instruct signal;
-tobe transmitted by;
-the remote transmitter station, and;
-said transmitter station transferring;
-said designated specific instruct signal to;
-a transmitter;
-and;
-(5) transmitting from;
-said remote transmitter station;
-an information transmission comprising;
-said mass medium program and;
-said designated instruct signal;
-said designated instruct signal being transmitted at one of specific times and on
specific channels.

Considering claim 105, there is no support for:
-A method of controlling;
-at least;
-one of;
-a plurality of receiver stations each of which includes;
-a television receiver;
-a signal detector;
-at least;
-one of;
-a computer and processor, wherein each of;
-said plurality of receiver stations is adapted;

-todetect;
-the presence of;
-at least;
-one control signal and;
-toinput;
-a subscriber reaction to;
-a specific offer communicated in;
-a television program;
-said method comprising;
-the steps of:
-(1) receiving;
-at least;
-one of;
-a code and;
-a datum at;
-a transmitter station;
-said one of;
-said code and;
-said datum designates;
-at least;
-one of;
-a product and;
-a service offered in;
-said television program and;
-said subscriber reaction;
-(2) receiving;
-said;
-at least;
-one control signal at;
-said transmitter station;
-said;
-at least;
-one control signal at;
-said;
-at least;
-one of;
-said plurality of receiver stations operates;
-toselect and control communication of information;
-at least;

-one of received with and;
-tobe associated with;
-said television program;
-(3) transferring;
-at least;
-one of;
-(i) said code;
-(ii) said datum and;
-(iii) said at least;
-one;
-control signal to;
-a transmitter at;
-said transmitter station at;
-a specific time;
-and;
-(4) transmitting;
-(i) said at least;
-one;
-of;
-said code and;
-said datum and;
-(ii) said at least;
-one;
-control signal from;
-said transmitter station.

Considering claim106, there is no support for:
-A method of communicating television program material to;
-at least;
-one receiver station including one of;
-a broadcast and cablecast television receiver;
-a television monitor;
-a control signal detector;
-a processor operatively connected to;
-said television monitor;
-said processor programmed;
-todetect and respond to;
-at least;
-one instruct signal in one of;

-a broadcast and cablecast transmission;
-said method comprising;
-the steps of:
-(1) receiving;
-a television program at;
-a transmitter station and delivering;
-said television program to;
-a transmitter;
-(2) receiving and storing;
-said;
-at least;
-one instruct signal at;
-said transmitter station;
-said;
-at least;
-one instruct signal at;
-the receiver station operates;
-toselect and control communication of;
-a datum which identifies information contained in;
-said television program;
-(3) transferring;
-said;
-at least;
-one instruct signal from;
-said transmitter station to;
-a transmitter;
-and;
-(4) transmitting;
-said television program and;
-said;
-at least;
-one;
-,,,instruct signal from;
-said transmitter station to;
-said;
-at least;
-one receiver station.

Considering claim107, there is no support for:

-A method of communicating programming in;
-a communications network;
-said communications network including;
-at least;
-one origination station and;
-an intermediate transmission station;
-said intermediate transmission station having;
-a transmitter;
-at least;
-one selective transfer device operatively connected to;
-said transmitter;
-fortransferring programming;
-an automatic control unit operatively connected to;
-said;
-at least;
-one selective transfer device;
-a first detector operatively connected to;
-said automatic control unit;
-fordetecting first signals;
-a receiver operatively connected to;
-said first detector;
-a second detector operatively connected to;
-said transmitter;
-fordetecting second signals, and;
-a logging unit operatively connected to;
-said second detector;
-said method comprising;
-the steps of: transmitting from;
-said origination stations;
-said programming;
-said programming including;
-at least;
-one signal;
-forcomparison;
-transmitting;
-at least;
-one retransmission control signal from;
-said origination stations;
-said intermediate transmission station receiving;

-said programming;
-detecting and passing to;
-said automatic control unit;
-said at least;
-one;
-retransmission control signal;
-and;
-said automatic control ,it performing;
-the step of selectively, transferring aid programming to;
-said transmitter in accordance with;
-said;
-at least;
-one retransmission control signal--.

Considering claim 108, there is no support for:
-A method of controlling;
-a network having;
-a remote intermediate transmitter station and;
-at least;
-one receiver station, with;
-said remote intermediate transmitter station;
-including;
-at least;
-one intermediate transmitter;
-for transmitting;
-a signal;
-a plurality of selective transfer devices;
-each;
-operatively connected to;
-said;
-at least;
-one intermediate transmitter;
-forcommunicating;
-said signal;
-a receiver;
-forreceiving;
-said signal from outside;
-said network;
-an instruction detector, and;

-a controller capable of controlling;
-at least;
-one of;
-said plurality of selective transfer devices, and with;
-said remote intermediate transmitter station;
-adapted;
-to (1) detect;
-at least;
-one instruction;
-(2) control communication of;
-at least;
-one signal in response;
-tosaid;
-at least one instruction, and;
-(3) deliver;
-said at least;
-one;
-signal to;
-said at least;
-one;
-intermediate transmitter;
-said method comprising;
-the steps of:
-receiving;
-said signal outside;
-said network;
-said signal having;
-at least;
-one first instruction which is operative in;
-said network;
-tooutput;
-said signal from;
-a first storage location and store;
-said signal at;
-a second storage location;
-receiving;
-at least;
-one second instruction outside;
-said network;

-said at least;
-one;
-second;
-instruction operative at;
-said remote intermediate transmitter station;
-tocontrol communication of;
-said signal;
-and;
-transmitting;
-said signal and;
-said at least;
-one;
-second instruction to;
-said network before a;
-specific time.

Considering claim 109, there is no support for:
-The method of claim 108, wherein television programming is communicated;
-toand stored at;
-said second storage location based on one of;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction;
-said method further comprising;
-the step of: transmitting;
-said television programming;
-toone of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station.

Considering claim 110, there is no support for:
-The method of claim 108, wherein;
-said network communicates;
-at least;

-one of;
-a television transmission and;
-a radio transmission;
-said method further comprising;
-the step of embedding;
-said signal in one of;
-a non-visible portion of;
-said television transmission and;
-a non-audible portion of one of;
-said television and;
-said radio transmission.

Considering claim 111, there is no support for:
-The method of claim 110, wherein;
-said;
-at least;
-one receiver station stores at least;
-a portion of;
-said at least;
-one;
-of;
-a television transmission and;
-a radio transmission based on;
-said signal.

Considering claim112, there is no support for:
-The method of claim 110, wherein;
-said signal contains one of;
-a code and;
-a datum which identifies information contained in;
-said at least;
-one;
-of;
-a television transmission and;
-a radio transmission;
-said method further comprising;
-the steps of: processing;
-said one of;
-a code and;

-a datum;
-and transmitting;
-said signal based on;
-said step of processing.

Considering claim 113, there is no support for:
-The method of claim 110, further comprising;
-the step of comparing;
-at least;
-some of;
-said at least;
-one;
-first instruction;
-toat least;
-a portion of;
-said at least;
-one;
-second instruction.

Considering claim114, there is no support for:
-The method of claim 110, wherein;
-said step of embedding is;
-performed before at least;
-a portion of;
-said signal is transmitted to;
-said remote intermediate transmitter station.

Considering claim 115, there is no support for:
-The method of claim 108, wherein;
-said signal contains one of television and radio programming;
-said method further comprising;
-the step of: embedding;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction in one of;
-a non-visible and;

-a non-audible portion of;
-said signal.

Considering claim 116, there is no support for:
-The method of claim 115, wherein;
-said step of embedding is performed before at least;
-a portion of;
-said signal is transmitted to;
-said remote intermediate transmitter station.

Considering claim 117, there is no support for:
-The method of claim 108, wherein;
-downloadable code containing;
-one;
-of;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction is assembled in;
-said network;
-said method further having one step from;
-the group consisting of:
-transmitting, one of;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second;
-instruction in;
-a plurality of signal words;
-and transmitting;
-at least;
-two first instructions and;
-said at least;
-one;
-second instruction to;

-said network at different times.

Considering claim 118, there is no support for:
        -The method of claim 108, wherein data is one of assembled and communicated
in;
        -said network based on;
        -said at least;
        -one;
        -first instruction and;
        -said at least;
        -one;
        -second instruction;
        -said method further having one step from;
        -the group consisting of:
        -transmitting one of;
        -a code and;
        -a datum which is operative in;
        -said network;
        -todesignate one of;
        -an information and;
        -a signal type;
        -tobe one of assembled and communicated;
        -and;
        -transmitting one of;
        -a code and;
        -a datum which one of designates and identifies;
        -said data.

Considering claim 119, there is no support for:
        -The method of claim 118, wherein;
        -said data one of are transmitted from;
        -said remote intermediate transmitter station and include;
        -downloadable code.

Considering claim 120, there is no support for:
        -The method of claim 118, wherein;
        -a control signal is organized and operates in;
        -said network;
        -toone of designate and identify one of;

    -a location of one of;
    -said signal and;
    -said data and;
    -a source communicating one of;
    -said signal and;
    -said data.

Considering claim 121, there is no support for:
    -The method of claim 118, wherein;
    -said at least;
    -one;
    -first instruction includes;
    -said one of;
    -a code and;
    -a datum.

Considering claim 122, there is no support for:
    -The method of claim 118, wherein;
    -said at least;
    -one;
    -second instruction includes;
    -said one of;
    -a code and;
    -a datum;
    -said method further comprising;
    -the step of:
    -transmitting;
    -a third instruction which is operative in;
    -said network;
    -toinstruct comparison.

Considering claim123, there is no support for:
    -The method of claim 108, wherein;
    -said specific time is;
    -a scheduled time of transmitting;
    -said signal from;
    -said remote intermediate transmitter station.

Considering claim 124, there is no support for:

-The method of claim 108, wherein;
-said plurality of selective transfer devices include;
-a switch and;
-a storage device;
-said method comprising;
-the steps of: transmitting;
-at least;
-one switch control instruction;
-and transmitting;
-at least;
-one storage control instruction.

Considering claim 125, there is no support for:
-The method of claim 108, wherein;
-said plurality of selective transfer devices include;
-a computer and;
-a computer peripheral memory;
-said computer capable of communicating to;
-a plurality of devices;
-said memory capable of storing;
-said signal;
-said method further comprising;
-the steps of: transmitting;
-at least;
-one communication control instruction;
-and transmitting;
-at least;
-one storage control instruction.

Considering claim126, there is no support for:
-The method of claim 108, wherein;
-said at least;
-one;
-second instruction comprises one of;
-a code and;
-a datum which operates at;
-said remote intermediate transmitter station;
-toidentify;
-said signal;

-said method further comprising;
-the step of: transmitting;
-a schedule which operates at;
-said remote intermediate transmitter station;
-tocommunicate;
-said signal to;
-a separate transmitter.

Considering claim 127, there is no support for:
-The method of claim 126, wherein;
-said schedule controls communication of;
-a plurality of signals of one of television,;
-radio,;
-data, and;
-multimedia programming;
-said method further having;
-at least;
-one step from;
-the group consisting of:
-transmitting;
-at least;
-one of;
-said plurality of signals of one of television, radio, data, and multimedia
programming;
-transmitting one of;
-a code and;
-a datum which designates;
-at least;
-one of;
-said plurality of signals of one of television, radio, data, and multimedia
programming;
-transmitting;
-a fourth instruction which is operative in;
-said network;
-tooutput;
-at least;
-one of;
-said plurality of signals of one of television, radio, data, and multimedia
programming from;

-a storage location;
-and;
-transmitting;
-a fifth instruction which is operative in;
-said network;
-tostore;
-at least;
-one of;
-said plurality of signals of one of television,;
-radio;
-data, and;
-multimedia programming.

Considering claim 128, there is no support for:
-The method of claim 126, wherein;
-said schedule operates at;
-the remote intermediate transmitter station;
-tocommunicate;
-said signal;
-toone of;
-a plurality of transmitters and;
-said separate transmitter;
-a plurality of times.

Considering claim 129, there is no support for:
-The method of claim 108, wherein;
-said second storage location is at;
-said at least;
-one;
-receiver station;
-said method further having one step from;
-the group consisting of:
-transmitting;
-a sixth instruction which is operative;
-toselect one of;
-said first storage location and;
-said second storage location;
-and;
-transmitting;

-a seventh instruction which is operative;
-todesignate;
-said at least;
-one;
-receiver station;
-tostore;
-said signal.

Considering claim 130, there is no support for:
-A method of controlling;
-a network having;
-a remote intermediate transmitter station and;
-at least;
-one receiver station, with;
-said remote intermediate transmitter station;
-including;
-at least;
-one;
-intermediate transmitter;
-transmitting;
-at least;
-one signal;
-a plurality of selective transfer devices each operatively connected to;
-said at least;
-one;
-intermediate transmitter;
-forcommunicating;
-said at least;
-one;
-signal;
-a receiver;
-forreceiving;
-said at least;
-one;
-signal from outside;
-said network;
-an instruction detector, and;
-a controller capable of controlling;
-at least one of;

-said plurality of selective transfer devices, and with;
-said remote intermediate;
-transmitter station receiving;
-said at least;
-one;
-signal;
-at least;
-one first instruction, and;
-at least;
-one second instruction;
-said method comprising;
-the steps of: programming;
-said remote intermediate transmitter station;
-tocontrol communication of and deliver;
-said at least;
-one;
-signal at;
-said at least;
-one;
-intermediate transmitter in response to;
-at least;
-one detected instruction;
-programming;
-said remote intermediate transmitter station;
-todetect;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction;
-and programming;
-said network;
-todetect and respond to;
-an instruction which is operative in;
-said network;
-tooutput;
-said at least;
-one;

-signal from;
-a first storage location and store;
-said at least;
-one;
-signal at;
-a second storage location before;
-a specific time.

Considering claim131, there is no support for:
-The method of claim 130, wherein television programming is communicated;
-toand stored at one of;
-said first storage location and;
-said second storage location based on one of;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction;
-said method further comprising;
-the step of: programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-tostore television programming at;
-a storage location in response;
-toone of;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction received from;
-a remote station.

Considering claim 132, there is no support for:
-The method of claim 130, further comprising;
-the step of: programming one of;

-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-todetect one of;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction embedded in one of;
-a non-visible portion of;
-a television transmission and;
-a nonaudible portion of;
-a radio transmission.

Considering claim133, there is no support for:

-The method of claim 132, wherein;
-said at least;
-one;
-receiver station stores at least;
-a portion of one of;
-said television and;
-said radio transmission based on;
-said at least;
-one;
-signal;
-said method further comprising;
-the step of: programming;
-said at least;
-one;
-receiver station;
-toselect;
-said at least;
-a portion of one of;
-said television transmission and;
-said radio transmission by;
-processing stored;
-subscriber data.

Considering claim134, there is no support for:

    -The method of claim 132, wherein;

    -said at least;

    -one;

    -signal contains one of;

    -a code and;

    -a datum which identifies information contained in one of;

    -said television transmission and;

    -said radio transmission;

    -said method further comprising;

    -the steps of: programming one of;

    -said remote intermediate transmitter station and;

    -said at least;

    -one;

    -receiver station;

    -toprocess;

    -said one of;

    -a code and;

    -a datum;

    -and programming one of;

    -said remote intermediate transmitter station and;

    -said at least;

    -one;

    -receiver station;

    -tocommunicate;

    -said at least;

    -one;

    -signal;

    -toone of;

    -a storage device and;

    -an output device based on processing;

    -said one of;

    -a code and;

    -a datum.

Considering claim 135, there is no support for:

    -The method of claim 132, further comprising;

    -the step of: programming one of;

    -said remote intermediate transmitter station and;

-said at least;
-one;
-receiver station;
-tocompare;
-at least;
-some of;
-said at least;
-one;
-first instruction;
-toat least;
-a portion of;
-said at least;
-one;
-second instruction.

Considering claim136, there is no support for:
-The method of claim 132, further comprising;
-the step of: programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-toone of detect and identify;
-an instruction based on;
-a varying pattern of one of location, timing and composition.

Considering claim 137, there is no support for:
-The method of claim 130, wherein;
-said at least;
-one;
-signal contains one of television and radio programming;
-said method further comprising;
-the step of:
-programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-toidentify;

-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction.

Considering claim 138, there is no support for:
-The method of claim 137, further comprising;
-the step of: programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-toone of detect and identify;
-an instruction based on;
-a varying pattern of one of location, timing and composition.

Considering claim139, there is no support for:
-The method of claim 130, wherein executable code containing;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction is assembled in;
-said network;
-said method further having one step from;
-the group consisting of: programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-toassemble code based on;
-at least;
-one discrete signal detected in;
-a transmission;
-and programming one of;
-said remote intermediate transmitter station and;

-said at least;
-one;
-receiver station;
-to assemble code;
-based on;
-discrete signals;
-received at;
-different times.

Considering claim 140, there is no support for:
-The method of claim 130, wherein data is;
-one of;
-assembled and;
-communicated in;
-said network based on;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction;
-said method further having one step from;
-the group consisting of: programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-torespond;
-toone of;
-a code and datum which is operative in;
-said network;
-todesignate one of;
-an information and;
-a signal type;
-tobe one of assembled and communicated;
-and programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;

-receiver station;
-torespond;
-toone of;
-a code and;
-a datum which one of designates and identifies;
-said data.

Considering claim141, there is no support for:
-The method of claim 140, further comprising;
-the step of: programming;
-said at least;
-one;
-receiver station;
-torespond to;
-at least;
-one downloadable instruction which is;
-transmitted from;
-said remote intermediate transmitter station.

Considering claim 142, there is no support for:
-The method of claim 140, further comprising;
-the step of: programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-toorganize one of;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction which operates in;
-said network;
-toone of designate and identify one of;
-a location of one of;
-said at least;
-one;
-signal and;

-said data and;
-a source communicating one of;
-said at least;
-one;
-signal and;
-said data.

Considering claim 143, there is no support for:
-The method of claim 140, further comprising;
-the step of:;
-programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-to;
-one of;
-locate and;
-identify;
-said one of;
-a code and;
-a datum based on one of;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction.

Considering claim144, there is no support for:
-The method of claim 140, wherein;
-said at least;
-one;
-second instruction includes;
-said one of;
-a code and;
-a datum;
-said method further comprising;
-the step of: programming one of;

-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-toperform;
-a step of comparison based on;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction.

Considering claim 145, there is no support for:
-The method of claim 130, wherein;
-said specific time is;
-a scheduled time of;
-transmitting;
-said at least;
-one;
-signal from;
-said remote intermediate transmitter station;
-said method further comprising;
-the step of:
-programming;
-said remote intermediate transmitter station;
-tocontrol;
-said at least;
-one;
-of;
-said plurality of selective transfer devices prior to;
-said scheduled time based on;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction.

Considering claim 146, there is no support for:
> -The method of claim 130, wherein one of;
> -said remote intermediate transmitter station and;
> -said at least;
> -one;
> -receiver station includes;
> -a switch and;
> -a storage device;
> -said method comprising;
> -the steps of: programming one station in;
> -said network;
> -torespond to;
> -at least;
> -one switch control instruction;
> -and programming one station in;
> -said network;
> -torespond to;
> -at least;
> -one storage control instruction.

Considering claim147, there is no support for:
> -The method of claim 130, wherein one of;
> -said remote intermediate transmitter station and;
> -said at least;
> -one;
> -receiver station includes;
> -a computer and;
> -a computer peripheral memory;
> -said computer capable of communicating to;
> -a plurality of devices;
> -said memory capable of storing;
> -said at least;
> -one;
> -signal;
> -said method further comprising;
> -the steps of: programming one station in;
> -said network;
> -torespond to;
> -at least;

-one communication control instruction;
-and programming one station in;
-said network;
-torespond to;
-at least;
-one storage control instruction.

Considering claim 148, there is no support for:
-The method of claim 130, wherein one of;
-said at least;
-one;
-first instruction and;
-said at least;
-one;
-second instruction comprises one of;
-a code and;
-a datum which operates at;
-said remote intermediate transmitter station;
-toidentify;
-said at least;
-one;
-signal;
-said method further comprising;
-the step of: programming one station in;
-said network;
-torespond to;
-a transmission schedule in respect of;
-said at least;
-one;
-signal.

Considering claim 149, there is no support for:
-The method of claim 148, wherein;
-said transmission schedule controls communication of;
-a plurality of signals of;
-one of;
-television,;
-radio,;
-data, and;

-multimedia programming;
-said method further having;
-at least;
-one step from;
-the group consisting of:;
-programming;
-one;
-of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-tocommunicate;
-at least;
-one of;
-said plurality of signals of one of television, radio, data, and multimedia
programming;
-programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-torespond;
-toone of;
-a code and;
-a datum which one of designates and identifies;
-at least;
-one of;
-said plurality of signals of one of television, radio, data, and multimedia
programming;
-programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-torespond to;
-an instruction which is;
-operative in;
-said network;

-tooutput;
-at least;
-one of;
-said plurality of signals of;
-one of;
-television,;
-radio;
-data, and;
-multimedia programming;
-from;
-a storage location;
-and programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-torespond to;
-an instruction which is operative in;
-said network;
-tostore;
-at least;
-one of;
-said plurality of signals of one of television, radio, data, and multimedia
programming.

Considering claim150, there is no support for:
-The method of claim 148, further comprising;
-the step of: programming one of;
-said remote intermediate transmitter station and;
-said at least;
-one;
-receiver station;
-tocommunicate;
-said at least;
-one;
-signal;
-toone of;
-a plurality of output devices and;
-an output device;

-a plurality of times.

Considering claim 151, there is no support for:
>-The method of claim 130, wherein;
>-said second storage location is at;
>-said at least;
>-one;
>-receiver station;
>-said method further having one step from;
>-the group consisting- of:
>-programming;
>-said network;
>-torespond;
>-toone of;
>-said at least;
>-one;
>-first instruction and;
>-said at least;
>-one;
>-second instruction which is operative;
>-toselect;
>-a storage location;
>-and programming;
>-said network;
>-torespond;
>-toone of;
>-said at least;
>-one;
>-first instruction and;
>-said at least;
>-one;
>-second instruction which is operative;
>-tocause;
>-said network;
>-tostore;
>-said at least;
>-one;
>-signal.

Considering claim 152, there is no support for:

    -A method of controlling;
    -a network having;
    -a remote intermediate transmitter station and;
    -at least;
    -one;
    -receiver station, with;
    -said remote intermediate transmitter station;
    -including;
    -at least;
    -one;
    -intermediate transmitter;
    -transmitting data;
    -a plurality of selective transfer devices;
    -each;
    -operatively connected to;
    -said at least;
    -one;
    -intermediate transmitter;
    -forcommunicating;
    -said data;
    -a receiver for receiving;
    -said data from outside;
    -said network;
    -a control signal detector, and;
    -a controller capable of controlling;
    -at least;
    -one of;
    -said plurality of selective transfer devices, and with;
    -said re mote intermediate transmitter station;
    -adapted;
    -todetect;
    -at least;
    -one control signal;
    -tocontrol;
    -the communication of;
    -said data in response to;
    -said at least;
    -one;

-control signal, and;
-todeliver;
-said data at;
-said at least;
-one;
-intermediate transmitter;
-said method comprising;
-the steps of: receiving;
-said data outside;
-said network;
-said data including;
-an instruct signal which is effective in;
-said network;
-tooutput;
-said data from;
-a first storage location and store;
-said data at;
-a second storage location;
-receiving;
-said at least;
-one;
-control signal outside;
-said network;
-said at least;
-one;
-control signal operative at;
-said remote intermediate transmitter station;
-tocontrol communication of;
-said data;
-and transmitting;
-said at least;
-one;
-control signal to;
-said network before;
-a specific time.

4.   Pending claims of the group, 1-152, that are directed to *digital* related processes and

apparatus, they are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter

which was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Considering pending claims of the group 1-152, that are directed to *digital* related

processes and apparatus, the group of pending claims is not found to be enabled in view of the

discussion given below as to the level of skill of the ordinary artisan at the time the '87 C.I.P.

disclosure was made. (As per an earlier agreement, copies of the "prior art" cited in this

paragraph have not been provided with this Office action since such copies were previously

provided in co-pending application S.N. 08/499,097).

I. Applicants have now presented claims which are directed to the distribution of, *inter alia*,

of digital television signals, digital signals, and anything directed to derivatives of the term

'digital', as was allegedly described by applicants *'87 C.I.P.* disclosure. However, the following

is noted:

As originally disclosed in the *'87 C.I.P.*, it is apparent that applicants used the

terminology, *inter alia*, "digital television signals" and "digital" to refer to television signals

which represented conventional television programming and which comprised digitized audio

and video signal components (see "Example #7" which begins of page 288 of instant

disclosure). However, in the '87 C.I.P. disclosure as originally filed, applicants clearly lacked

any specific description as to how:

a) the "digital television signals" of applicants' alleged invention(s) were to have been formatted for transmission over a television distribution system using the method(s) that are now recited in the pending claims; and

b) as to how the transmission circuitry of applicants' alleged invention(s) was modified and/or configured for the purpose of handling, *inter alia*, "digital television signals" in the matter that is now recited in the pending claims.

Apparent justification for the lack of such descriptions seems to be based on:

1) the allegation made by applicants' original '87 C.I.P. disclosure that "digital television signals" and like terms of the type described therein, were well known in the art at the time of applicants' alleged invention (note lines 30-33 on page 288 of applicants' disclosure), and;

2) on the apparent assumption that the "digital television signals" of applicants' disclosure could be handled/transmitted in a manner that was interchangeable with the handling and transmission, *inter alia*, of conventional analog television signals.[4] Hence and on the basis of these substantiated facts, Examiner legally concludes that such

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[4]For example, the original '87 C.I.P. disclosure described portions of applicants' alleged invention(s) as having operated to transmit digital television signals over a TV channel during a *first period of time* and as having transmitted analog television signals over said same channel during a *subsequent period of time* (see lines 1-5 on page 302 of applicants' instant disclosure). However, no discussion as to any difference in the handling of the two different television signals by the alleged invention(s) was ever provided, suggested, or recognized by applicants' original '87 C.I.P. disclosure).

allegations and assumptions, made at the time of applicants' alleged invention, are

respectively false and erroneous.

The examiner emphasizes that he does not dispute the fact that broadcasting digitally

formatted television signals was in fact well known to those skilled in the art at the time

of applicants' alleged invention. Specifically, the examiner acknowledges that the

transmission of digital television signals was known in the art when, under "rare"

circumstances, a transmission channel of sufficient bandwidth was available. However, it

is noted that the transmission of these conventional digital television signals was *not*

interchangeable with the transmission of analog television signal as assumed by

applicants' original '87 C.I.P. disclosure because of the extremely large bandwidth that

was required to transmit conventional digital television signals; i.e. this was true even

when the digital television signals had been *compressed* using state of the art bandwidth

compression techniques [1] [2] [3].

Given the above, the examiner maintains that the description found in applicants'

original '87 C.I.P. disclosure pertaining to the transmission of "digital television signals"

using applicants' alleged invention(s) was insufficient to have enabled the pending

claims using the terminology. Specifically and based on these substantiated facts, it is

legally concluded that applicants' original '87 C.I.P. disclosure at least failed to disclose

and describe the manner in which the recited "digital television signals" had to have been

formatted and processed so as to have enabled them to have been handled in the manner

that was originally described in the '87 C.I.P.; e.g. the manner that now seems to be

claimed.

In view of the above, applicants are hereby requested to submit evidence (e.g. a US

Patent or a printed publication) which support the allegations and assumptions on which

applicants' original '87 C.I.P. disclosure was clearly based; i.e. references which show

the means needed to format and transmit "digital television signals" in a manner required

by applicants' disclosed/claimed invention(s) were in fact well known to those skilled in

the art at the time of applicants' alleged invention.

II. The examiner notes that even those sections of applicants' original '87 C.I.P. disclosure which

were directed to the transmission of, *inter alia*, "digital television signals", e.g. "Example #7"

which begins on page 288 therein, provide few clues as to how the recited "digital television

signals" and like terms were formatted, handled, and transmitted by applicants' alleged

invention(s) in order to have enable them to have been processed in the manner that is now set

forth in the pending claims. For example, the description of applicants' alleged invention(s) failed

to explain:

1) how the "digital television signals", *inter alia,* of applicants' alleged invention(s) were

formatted and/or compressed so as to have enabled them to have been handled,

transmitted, and/or processed in the manner that is now recited in the pending claims;

2) how the "digital television signals", *inter alia*, of applicants' alleged invention(s) were

formatted and/or compressed so that they could be transmitted over the same TV channel

that was used to carry conventional analog TV broadcasts as originally disclosed (see

lines 1-5 on page 302 of applicants' disclosure);

3) how the subscriber stations of applicants' alleged invention were modified in order to

have handled/processed "digital television signals", *inter alia*, in the manner that is now

claimed;

4) how the "SPAM" messages of subscriber stations were to have been embedded in the

"digital television signals", how said "SPAM" messages were to have been carried by

said digitally formatted television signals, and how said "SPAM" messages were to have

been extracted from digitally formatted televisions signals;

5) how the bit-rate of the "SPAM" messages that were carried by said digital

television signals was related to the bit-rate of the digital television signals into which

they were embedded and how this bit rate related to the bit-rate of the "SPAM" signals

that were carried in the analog television signals and how the disclosed/claimed system

was configured to handle any such differences (e.g. while not addressed by applicants'

original disclosure, it appears that the conventional differences between the bandwidth of

digital television signals and analog television signals would translated into respective

difference in the bit-rate of the "SPAM" messages that were embedded in respective ones

of the two types of television signals).

III. On the basis of the substantiated facts set forth in parts "I" and "II" above, the Examiner

legally concludes that the pending claims which are directed to the handling/transmission of

"digital television signals" would have required *undue* experimentation by applicants' '87 C.I.P.

disclosure because the allegations and assumptions, on which the disclosed handling and

transmission of such digital television signals was based, were respectively false and erroneous.

The examiner legally concludes that these pending claims represent an *invitation to experiment

unduly*[5] when read in the context of the state of the "digital television signal", *inter alia*,

transmission art which actually existed at the time of applicants' alleged invention; i.e. the

technology required to have handled/transmitted "digital television signals" in the manner that

was disclosed, and thus in the manner that is apparently claimed, does not appear to have existed

at the time of applicants' alleged invention.

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[1] The publication "Digital Television Transmission With 34 Mbit/s" by <u>Burkhardt et al</u>.

evidences a conventional transmission system in which a Television signal was broadcast in a

digital format (see Figure 2). Even though the bandwidth of the digital television signal was

compressed prior to transmission, said digital signal still required a 22 MHZ transmission

channel (see the second paragraph under the heading "Bit-Rate Reduction" on page 244); i.e.

wherein a bandwidth of 22 MHZ is almost 4X that of a standard 6 MHZ TV channel used for

analog television signal transmission.

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[5]It is noted that because pending claims are not original, actually,__no experimentation is__
__permitted__ under Section 112's written description requirement.

[2] The US Patent No. 3,755,624 to <u>Sekimoto</u> evidences a conventional system in which a

television signal was digitally formatted and bandwidth compressed prior to broadcast. The

resulting bit-rate of this compressed digital television signal was 32 Mbit/s which required a

bandwidth more than 3X that of said standard 6 MHZ Tv channel.

[3] The US Patent No. 4,742,543 to <u>Fredericksen</u> illustrates a system in which a television signal

was processed on the transmitter side of a broadcast system in a digital data format (see figure 1).

However, prior to broadcast, <u>Fredericksen</u> converted the digital television signal back into an

analog signal format (@33). Such D/A conversion was described as having been necessary

because the standard analog TV channel that was used to transmit the television signal was *not* of

sufficient bandwidth to carry the signal in it's digital format (note lines 18-23 of column

5). This provides further substantiated facts for why the conventional "digital television signals"

could not have been handled in the manner described by applicants' as their alleged invention(s)

without undue experimentation.

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5.   Pending claims of the group, 1-152, that are directed to *data* (and terms derived from

data, i.e. *datum*, *indicia*, etc.) related processes and apparatus, they are rejected under 35

U.S.C. 112, first paragraph, as containing subject matter which was not described in the

specification in such a way as to enable one skilled in the art to which it pertains, or with which it

is most nearly connected, to make and/or use the invention.

a)   As originally described in the '87 C.I.P., applicants' written description described a

method for formatting various types of digital control and display data segments called: *"SPAM*

Messages". Once formatted, the "normal locations" of television and/or radio programming

were embedded within the *SPAM Messages* so as to have created a combined signal which was

then transmitted through a 'conventional radio channel' or a 'conventional television channel'

wherein the "normal location" was described as 'the vertical blanking interval' of a television

video signal.

b)   As also originally described in the '87 C.I.P, applicants' disclosure contained broad

statements which suggested that said *SPAM messages* could be embedded within the "normal

locations" of other types of programming besides radio and television programming.

Specifically, the '87 C.I.P. also disclosed that the *SPAM messages* could be embedded within the

"normal locations" of "other media" such as broadcast "**data**" or print (see the last line on instant

page 35; lines 17-20 on instant page 71 and lines 7-9 on instant page 72). **However**, these

statements are found to contradict the alleged invention as described by the later described so

called *"more precise"* description (see lines 17-20 on instant page 72).

In the alleged *"more precise"*description, applicants explicitly taught that it was the

"other media" which is embedded within the "information portion" of said SPAM messages.

Hence the contradiction:

-first applicants teach that said SPAM messages are embedded within the "normal

locations" of said "other media"; but later they teach

-it is the other media that is embedded within the information portions of said SPAM

messages!

The disclosure, by these substantiated facts, *inter alia*, has caused examiner to legally conclude

that the written description related to the term **"data"** and it's derivatives is so contradictory to

the point that it would have required *undue*[6] experimentation in order for the ordinary artisan to

practice the alleged invention.

The examiner notes that the preceding discussion is supported by the fact that all concrete

examples of system(s) and method(s) which were specifically illustrated in applicants' original

disclosure were consistent only with said more precise teachings.

c) As is evidenced from parts **"a)"** and **"b)"** of this paragraph, applicants' original '87

C.I.P. disclosure did describe system(s) which formatted, transmitted, received, processed, and/or

displayed radio and television *program units* under control of, and/or along with, embedded

"SPAM messages". However, as evidenced in parts **"a)"** and **"b)"** of the above, applicants'

disclosure did not describe system(s) and method(s) which formatted, transmitted, received,

processed, and/or *displayed "data" program units under control of, and/or along with,*

associated SPAM messages because *data program units* (i.e. as the terminology **"data"**, *inter*

alia, was coined and used within applicants' written description) were actually transmitted with

---

[6]As explained above, Section 112's written description requirement permits no
experimentation even when less than undue when claims are not originally filed, as in the present
case.

said SPAM messages. Specifically, the examiner maintains that said *"more precise"* teachings

of applicants' own disclosure evidenced that the handling of the radio and television

programming *program units* by the disclosed system(s)/method(s) was different from, and was

non-analogous[7] with, the disclosed handling of *data* by the disclosed system(s)/method(s). More

Specifically, said *more precise* teachings of applicants' original disclosure evidence the fact that

only TV and radio programming was carried in the form of said described *program units*, while

said "data" was carried as information packets located within said SPAM messages themselves

(see part "b)" of this paragraph).

    d) Given the substantiated facts set forth in **"a)", "b)", and "c)"** above, the examiner

legally concludes that the recitations of pending claims using the term and it's derivatives would

have required *undue* experimentation by applicants' '87 C.I.P. Specifically, the examiner finds

the facts that applicants' disclosure at least failed to set forth the means and/or steps needed to

make and use system(s)/method(s) in which recited **"data"**, *inter alia*, were formatted,

transmitted, received, processed, and/or displayed in the manner which was explicitly

---

[7] The examiner notes that if the disclosed SPAM signals were simply embedded within
the digital data stream(s) of *other media*, as they were embedded within the television and radio
programming, the ability of the disclosed "processors" to detect and synchronize themselves to
the *SPAM signals* would be destroyed because the "cadence" used and required by the disclosed
processors for synchronization purposes would no longer have existed; e.g. the start of a new
SPAM message would *not* always have followed an "end-of-field" (EOF) signal as was required
by processors in all of the embodiments of applicants' disclosure. However, it is noted that such
a synchronization problem was clearly avoided when the other media was carried within the
SPAM messages as appears to have actually been taught by the *more precise* teachings of
applicants' disclosure (again, see lines 17-20 on page 72).

disclosed/exemplified for television and radio *program units*. Specifically, in applicants' written description, the disclosed system(s) and method(s) for formatting, transmitting, received, processing, and/or displaying said television and radio *program units* were incompatible with system(s) and method(s) which would have been needed to format, transmit, receive, process, and/or display *program units* comprised of **"data"**. Moreover, it is maintained that **"data"** (as coined and used within applicants' written description) could not be processed in the same manner that was described for television and radio programming program units as now appears to be claimed in the above enumerated pending claims.

6.   Claims of the group 1-152, are rejected under 35 U.S.C. 112, first paragraph, because the **best mode** contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon, *inter alia*: the **nesting** of detectors, signal processors, monitors, decryptors, decoders, buffers, controllers, computers, micro-computers.

Also for the apparent nesting of 'programming in data', and of 'data in programming', 'data being programming', and 'data not being programming', etc, what is programming, and what is not programming is not understood.

The '87 discloses is mis-leading and confusing. The ordinary artisan would *not* have understood terms, *inter alia*, was applicants best mode in view of the '87 disclosure *alone*, i.e. the instant disclosure. It is concluded that the use of the omitted '81 disclosure to understand the instant disclosure is impermissible and falls subject to the *insidious* possibility circumventing Section 112. The ordinary artisan of '87 would have to understand what was set forth therein

without the benefit of another document, i.e. '81. Moreover, the circular description for what is

"data", "programming", for what "programming unit", "signal word", "data unit" would also

have caused the ordinary artisan so much trouble that the best mode would not have been

recognized when considering the '87 disclosure *alone*.

Notwithstanding, the description at pages 14-15 is so confusing as to what shall be the

best mode for the pages 14-15 terms including, *inter alia*, **signal *word***, signal unit (reference

discussion under objection to the specification above), *etc*, that the best mode cannot be

discerned for which shall be used.

Likewise, in '81 applicants describe their preferred mode to preclude headers; however,

the '87 spec appears to use nothing but *headers* for the SPAM (reference discussion above), even

though applicants appear to describe 'not using headers', once again, as their best mode in '87. It

appears applicants have concealed the best mode for their data, *inter alia*, because even though

they described the preferred mode as 'not using headers', they, in fact, failed to reveal how they

actually accomplished, *inter alia*, their preferred mode.

The instant case is like In re Ruschig, 379 F.2d 990, 154 U.S.P.Q. 118 (C.C.P.A. 1967)

where the judge's analysis is found to be appropriate to applicants' claims.

> It is an old custom in the woods to mark trails by making blaze marks on trees. It
> is no help in finding a trail or in finding one's way through the woods where the trails
> have disappeared-or have not yet been made, **which is more like the case here-to be
> confronted simply by a large number of unmarked trees.** Appellants are
> pointing to trees. **We are looking for blaze marks which single out particular trees.
> We see none...**Working backward from a knowledge of chlorpropamide, that is by
> hindsight, it is all very clear what route one would travel through the forest of the

specification to arrive at it. **But looking at the problem, as we must, from the standpoint of one with no foreknowledge** of the specific compound, it is our considered opinion that the board was correct in saying:"Not having been specifically named or mentioned in any manner, one is left to selection from the myriads of possibilities encompassed by the broad disclosure, with no guide indicating or directing that this particular selection should be made rather than any of the many other which could also be made". (emphasis added).

Ruschig, 154 U.S.P.Q. at 122-123.

The '87 disclosure is analogous to the Ruschig woods. The Section 112 responses are

pointing to applicants' woods in an analogous way that Ruschig appellants were "pointing to

trees". Working backward from a knowledge later provided in Section 112 responses, there are

some instances where limited support *might* exist. However, looking forward at the problem as

the examiner *must* from the standpoint of no "foreknowledge", and hence without the Section

112 responses, the examiner cannot find the processes in the manner as they are now claimed.

Applicants' disclosure addresses a variety of claim limitations with varying degrees of

specificity, and apparently describes contradictory processes and describes terms with

contradictory description. The instant disclosure often reads. 'it might be this; but, 'it might be

that'; but 'it might be neither'. It appears that what 'blazes' are available for approaching the

problem without the benefit of later provided blaze marks, i.e., applicants' Section 112

responses, appear to lead the ordinary artisan right off the trail and into a thicket of bushes.

Therefore, examiner recognizes insufficient blaze marks to motivate the assembly of pending

claim limitations as they are now claimed.

Notwithstanding, the scattering of teachings across multiple applications in the chain of continuity, under the facts of the instant application, constitute either **(1)** an affirmative concealment of the best mode of carrying out applicants invention (<u>Randomex, Inc. v. Scopus</u> <u>Corp</u>., 849, F.2d 585, 7 U.S.P.Q. 1050 (Fed. Cir.. 1988)), or **(2)** a total failure to be in possession at the time of filing of what is now claimed. Examiner finds **(2)** to *at least* be the instant case as explained above. However, *assuming arguendo* **(2)** is not the instant case, the following facts are substantiated for **(1)**.

Considering pending claims of the group 1-152, *assuming arguendo,* that pending claims are supported 'through' the '87 disclosure so as to benefit from the '81 filing date even though applicants apparently have mistaken the '81 disclosure for the '87 disclosure. Moreover, *assuming arguendo*, that examiner has not mis-understood *the alleged pending claim* support, then the *alleged pending claim support* appears to have been hidden for reasons, *inter alia*, described above.

<u>The very fact that applicants keep pointing to the parent '490 disclosure for</u> <u>demonstrating support to the instant disclosure in response to Section 112 rejections to the</u> <u>instant disclosure,</u> *is itself evidence of concealment.*

Examiner does not find sufficient blaze marks in the woods, *he is lost.*

The *alleged pending claim support* tables are considered little to nothing more than attempts by to later provide what is *missing* from the '87 disclosure, even though it *might* have been present in '81.

<u>However, examiner is prohibited, under Section 112's written description requirement, to use '81 for understanding '87, else Section 112 gets circumvented.</u>

However, *assuming arguendo,* that the terms including, *inter alia,* 'data', 'digital', etc. can somehow meet (2)[8], questions are raised as to whether applicants disclosed their best mode. The meanings and concepts of the terms 'data', 'digital', 'programming', etc., appear to have been hidden. In any event, the terms clearly evolved, often ambiguously, so they would not be recognized to convey the same concept in '87 as they *might* have in '81.

In summary under best mode, few to no blaze marks were provided for adequately marking the path in '87, per <u>Ruschig</u>.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Pending claims of the group 1-152, are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

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[8]Specifically, possession, Section 112's written description requirement.

Considering pending claims of the group 1-152, as applicants have apparently

mistaken the parent '490 disclosure for the instant disclosure, pending claims are

rejected for failing to claim the invention.

9.   Pending claims of the group 1-152 using the terms having different

descriptions from '81 and '87, are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicants regard as the invention.

Considering claims of the group 1-152 using terms having different

descriptions, from '87 and '81. For example, when the '87 description is different so

as to contradict the '81, it appears that the claim gets benefit only with respect to '87

and the claim is constructed under the broadest reasonable interpretation standard

with respect to '87 **only**. Likewise, when a term is elaborated upon and the claim

modifies the term with '87 description, the term gets an '87 effective filing date.

However, it appears the Federal Circuit constructed the term 'information of a

selected program unit' in claim 35 of '277, with respect to both descriptions in the '87

and the '81 specifications. See Personalized Media Communications, L.L.C. v.

International Trade Commission et al, Appeal No. 97-1532 (decided January 7, 1999).

While this might be appropriate when *already* a patent, and when Section 112 first

paragraph was *not* in judicial review, the examiner maintains it is inappropriate

before a patent in view of the *preponderance of the evidence test for patentability*

under both the vague and indefinite prohibition of Section 112 second paragraph, and

also Section 112 first paragraph. Hence, terms having different definitions from '87

to '81 are considered vague and indefinite, including the terms, *inter alia*,

'information', 'instruction', 'programming', 'program', 'data', 'digital', and

derivatives of each term, etc. Applicants are respectfully requested to remove all

claim terms from pending claims when their conceptual meanings are not identical for

benefiting from '*81* priority.

10.   Pending claims of the group 1-152 using the terms, *inter alia*, 'program' and

'programming' derivatives thereof, are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim

the subject matter which applicants regards as the invention.

        The examiner notes that the original '87 C.I.P. disclosure of the present

application defines the terminology "programming" differently than the '81

disclosure. Specifically:

        a) The Original disclosure of the present application explicitly defined

        the term "programming" to mean: "everything that is transmitted

        electronically to entertain, instruct, or inform including television,

        radio, broadcast print, and computer programming as well as combined

medium programming" (see lines 5-8 on page 11 of the present written

description); while in contrast

b) The '81 disclosure explicitly defined the same terminology to mean:

"everything transmitted over television or radio intended for communication

of entertainment or to instruct or inform" (see lines 4-7 in the abstract of US

patent 94,694,490).

I.   With respect to the terms "program" and "programming" as recited in the

pending claims:

 A) As it relates to the broadcast and transmission art, the term "*program*" is

defined by the Second College Edition of the 'American Heritage Dictionary"

to mean: "a scheduled radio or television show". This conventional definition

of the term "program" seems to be consistent with applicants' use of the

terminology throughout the '81 disclosure. However, this conventional

definition is clearly inconsistent with the definition given to the term

"programming" via the original disclosure of the present application (see the

preceding paragraph of this Office action).

B) While applicants may be their or her own lexicographer, a term in a claim

may not be given a meaning is, *inter alia*, repugnant to the usual meaning of

that term, In re Hill, 161 F.2d, 367,73. U.S.P.Q. 482 (C.C.P.A. 1947). The

examiner maintains that the use of the terminology "programming" and

"program" in pending claims (enumerated above) is repugnant to what was the

normal/usual use of the terminology. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102

that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

12.   Claims 1-152, are rejected under 35 U.S.C. 102(a,b,e) as being clearly

anticipated by patents '490 and '725.

Considering claims 1-152, applicants allege they are fully supported by the

'81 disclosure. Examiner incorporates by reference, into this rejection, all previous

responses to Section 112 rejections, noting that applicants have apparently mistaken

the '81 disclosure for the instant disclosure.

Claim Rejections - 35 U.S.C. § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in the art to which said subject
> matter pertains. Patentability shall not be negatived by the manner in which the invention was
> made.

This application currently names joint inventors. In considering patentability
of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter
of the various claims was commonly owned at the time any inventions covered
therein were made absent any evidence to the contrary. Applicant is advised of the
obligation under 37 CFR 1.56 to point out the inventor and invention dates of each
claim that was not commonly owned at the time a later invention was made in order
for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35
U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

14.   Claims 1-152 are rejected under 35 U.S.C. 103(a) as being unpatentable over

WO 89/02682.

Considering claims 1-152, to the extent that applicants can satisfy the

enablement requirement of 112 1st but not the support requirement, a comparison has

been made between a) the *alleged pending claim support* (Examiner incorporates by

reference the *alleged pending claim support; see previous responses to Section 112*

rejections) and b) embodiments/processes taught in applicants' publication of March

23, 1989, by way of WO 89/02682. It is found, even if pending claims can be arrived

at with less than undue experimentation, then it would most likely be from 'mixing

and matching' the WO 89/02682 embodiments. And the ordinary artisan, to the

extent that mixing and matching could have been done with undue experimentation,

would have done so for the benefit of providing greater functionality to the

subscriber.

15.   Pending claims of the group, 1-152, that are directed to processes of

controlling cable head end processes and monitoring of those processes and combined

medium presentation, they are rejected under 35 U.S.C. 103(a) as being unpatentable

over Greenberg U.S. patent 4,547,804 ('804) in view of Galumbeck et al U.S. patent

no. 4,725,886 ('886).

Considering pending claims of the group, 1-152, that cover, *inter alia*,

processes of controlling CATV head end process and apparatus and monitoring of

those processes and combined medium presentation are suggested by '804. '804,

suggests the claims that cover method and apparatus for identifying and verifying the

proper airing of television broadcast programs wherein the television broadcaster can

be assured that the programs were televised and received and properly aired at the

scheduled time. '804 teaches utilizing pre-recorded or line video programs in which

imprinted on a pre-selected scanning line is a digital encoded identifying number.

These video programs with digital encoding are then distributed to network and local

broadcast stations to be televised with this identification. A plurality of selected aired

television channels are then automatically simultaneously monitored at a typical

reception site whereby the encoded broadcast is appraised as to the quality of its audio

and video, identified and timed, and which information is then stored for a later

comparison to that which was actually intended to be aired. The illustration and

written description for Figure 2 suggests, *inter alia*, the identification signal generator

having all of memory means, detector means, video tape recorder, playback, and

video tape recorder, and central computer, and processes thereof. The illustration

and written description for Figure 2 suggests, *inter alia*, the broadcasting from the

transmission station to the cable station and also suggests the monitor station and

processes thereof. Notwithstanding, the switchable RF tuner, decoder, sequential

storage, video channel switch, time generator, verification signal generator, and

computer storage are suggested, *inter alia*, by Fig 3 and it's written description.

Claimed subject matter directed to specific *data* and *other* programming sources,

uses, and processes, that are not suggested by '804, are suggested by '886. For

example, '886 suggests the claims that cover a communications system having an

addressable receiver that is programmable, addressable, for receiving, storing,

processing, and sending digital and conventional video audio and control signals for

use in a cable video network. '886 suggests reception of audio and composite video

and digital data received from various sources such as a satellite transponder and from

local sources. The digital data may be processed into textual video data by character

generation techniques, as may be other digital data received from a local keyboard,

local weather sensors or *other* digital data interfaces. The receivers may be addressed

in units or groups for purposes of receiving individually, locally or regionally tailored

text information and are typically controlled simultaneously from one control source.

The combination of '804 and '886, would have suggested the claimed invention to the

ordinary artisan so as to be obvious, as motivation, *inter alia,* is found for the purpose

of fulfilling the needs of data consumers throughout a large geographic area, and to

have continual, current local and national information.

16.   Pending claims of the group 1-152, that are directed to, *inter alia,* processes of

controlling broadcast subscriber stations, including decrypting, processing, storing,

generation, and monitoring of those processes and combined medium presentation,

are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffers et al (U.S.

patent no. 4,739,510)('510).

       Considering pending claims of the group, 1-152, that are directed to, *inter*

alia, processes of controlling broadcast subscriber stations, including decrypting,

processing, storing, generation, and monitoring of those processes and combined

medium presentation, they cover what '510 suggests...broadcast programming

including, *inter alia,* audio and control signals that are digitized and inserted into the

horizontal blanking interval of distributed television programming. The control

signal are in the form of a data stream which incudes a header containing group

address, sync, and programming information for receiving units, and a portions

addressable to contain information for control of particular individual receiving units

in an addressed group. Information is in the addressable portions and can be altered

on a real time basis so system operator has direct control over certain functions of

individual receiving units from the transmitting end. Figure 1 and it's written

description disclosure, *inter alia*, a broadcast network having a computer, business

center computer, voice response systems, monitor, controller, programming input,

and video and audio channels to a program processing unit. There is disclosure of a

satellite system, and a subscriber station having receiving apparatus and addressable

decoding controller, and television display. Figure 2a,b and it's written description

disclosure, *inter alia*, various processing circuitry and decryption circuitry for audio,

memory, buffer, and related processes. Figure 3 and it's written description

disclosure, *inter alia*, signal formatting with packets, headers, addressable bits, error

correction bits, encryption, and *other*. Figure 4 and it's written description

disclosure, *inter alia*, more signal formatting including sync and address information,

program related information, impulse pay per view, checksum, program cost, program

time, programming tier authorization, unique identification of programming, and

various group and system addressing and processes using the signaling. Figures 5,6a-

b, and corresponding written description disclosure, *inter alia*, more signal formatting

including message types having, authorization bit map, common audio key, home

channel, as well as blocking bit map, call in time, telephone password, credit card

password, overflow call in level, and also message time with subscriber addressing,

and signature number used to select key fragments from subscriber signature key to

decrypt, and encrypted message, and checksum. Figures 6c-e, and corresponding

written description disclosure, *inter alia*, message types 3-5, having call in telephone

number, alternate call in telephone no, channel assignment tables for first 8 and

second 8 channel respectively, and process related thereto. Figures 6f-g and

corresponding written description disclosure, *inter alia*, signal format for message

types 6-7, having direct control of segments, control and reset, audio threshold, data

threshold, zip code blackout, mask blackout, trap message bit for peripheral

interphase, and peripheral device signatures a-b respectively.   Figure 7, and

corresponding written description disclosure, *inter alia*, subscriber station process for

channel selection, decrypting, processing, unit address mapping, and storing

decrypted information   Even though it appears, *inter alia*, that applicants may be

reciting their claims so broadly that "local" generation of various programming can be

combined with programming received from elsewhere to form a combined medium

presentation for subsequent transmission to the subscriber station, examiner *only*

finds support for the "local" generation to occur at the subscriber station and *not a*

station intermediate. However, to the extent that there is support for the former

mentioned "local" generation, even though it is not found, it would have been

obvious, *inter alia*, to provide the system operator with greater control of the network.

17.   Pending claims of the group, 1-152, that are directed to, *inter alia*, processes

of controlling affiliate stations and processes and monitoring of those processes and

combined medium presentation, they are rejected under 35 U.S.C. 103(a) as being

unpatentable over Hazelwood et al (U.S. patent no. 4,025,851) ('851) in view of the

publication "System and Apparatus for Automatic Monitoring Control of Broadcast

Circuits" by Yamane et al, and the Australian Patent document No. 74,619 to Hetrich

('619).

        Considering pending claims of the group 1-152, that are directed to, *inter alia*,

processes of controlling cable head end processes and monitoring of those processes

and combined medium presentation, '851 suggests the term 'processor' wherein the

network station, the affiliate station, and the individual circuits which make up the

network and affiliate stations, all function to process signals and hence are considered

processors of a kind. '851, suggests television broadcast distribution processes and

apparatus having a central broadcasting station represented by elements 10, 12, 14,

and 22, and a network station including a source 10, of network television

programming, wherein the network programming is distributed at 16 from the

network station to a plurality of "local" affiliate television broadcast stations, and

wherein the plurality of local affiliate broadcast stations receive, and selectively re-

broadcast the network television programming wherein Figure 1 and it's written

description discloses, *inter alia*, one of the suggested affiliate stations. Figure 3 and

it's written description discloses, *inter alia*, structure of a typical broadcast

distribution system having each of the plurality of affiliate stations of the distribution

system; and having, a source of local programming 44, which consists of different

television signal sources including video tape recorders, wherein some of the video

tape recorders function to record portions of the received network programming such

that the record network programming could be played back and broadcast at some

future time thereby imparting a predetermined time to delay the local re-broadcast of

the network programming (see lines 29-39 of column 4). There is also disclosed,

inter alia, a television program selector 16, which receives the locally produced

programming from the local programming source 44, and which selectively outputs

one of the two types of programming for broadcast and for re-broadcast via a

predetermined television channel transmitter 42. As suggested, *inter alia*, the affiliate

station structure operates by: receiving network television programming from the

network station 16; producing local television programming via local programming

source 44; selecting recorded portions of the received network television

programming, via tap recorder located within the local programing source, wherein a

delay is imparted to the network programming prior to being reproduced and

transmitted as part of said locally produced television programming (see 44 as

described, *inter alia*, in lines 28-33, of column 3); selecting one of the received

network programming and the locally produced television programming for broadcast

and for rebroadcast of the selected programming to a plurality of subscribers over the

predetermined television channel 42. '851 discloses a modification to the typical

system with circuitry that enables a given network station of the system to monitor

programming being broadcast and re-broadcast by the affiliate stations. '851 suggests,

inter alia, enabling the network station to embed signals into the VBI of the network

television programming that was being broadcast to the affiliate station referring to 12

and 14 of figure 1, so that the embedded codes (referring to figure 4) identify the

programming being broadcast by title, source of origin, time of transmission (see,

inter alia, lines 51-68 of column 5 and lines 1-5 of column 6). Moreover, '851

suggested, for accomplishing the monitoring, allowing each affiliate station to have

contained means (i.e. computer system 30, 32, 34, and 36, of figure 3) for monitoring

and "logging" the television programming being broadcast from the affiliate station

via the detection and monitoring of said embedded codes. The computer system at

each of the affiliate station is operable to report the results of the monitoring and

logging process to a remote station location such as the network station (i.e. to the

centrally located host computer system 38 of figure 3). '851 suggests the embedded

monitoring *instructions* codes as encoded and distributed by the television

distribution system. The codes represent additional information encoded then

embedded within the network television programming so that they could be broadcast

downstream to the affiliate stations and local TV receivers. Figure 1 and it's written

description disclosure, *inter alia*, a transmitter station receiving mass medium

television programming signal from a network programming signal source (e.g.

camera 10), wherein the mass medium programming signal, implicitly comprises

audio (it's conventional). The figure 1 station, *inter alia*, receives instruction signals

used for generating the monitoring codes which were generated at figure 1 12, e.g.,

wherein the generated monitoring codes (see figure 4) were then embedded into the

mass medium programming via a summing circuit 14 of figure 1 for communication

to the affiliate station (e.g. "Network outlets"). The network feed 16 of figure 1

corresponds to means for performing communication programming to a storage

device in that the network feed communicates mass medium programming to the

affiliate station where it is selectively received and recorded by a VTR (e.g. storage

device), for delayed re-broadcast. The monitoring codes are embedded into the mass

medium programming so as to have occurred during one ore more horizontal lines of

the vertical blanking interval of the mass medium programming. At the encoder 12 of

figure 1, has to have been controlled so as to communicate the monitoring codes to

the summing circuit 14 at "selected" times in view that the monitoring codes were

carried through the line at the selected time in which they were provided to summing

circuit 14. The described VTR corresponding to various recited storage medium,

stores the monitoring codes along with the mass medium programming and therefore

comprises means for performing storing of programming signal and instruct signal at

a storage device. Pending claims of the group, 1-152, that are directed to, *inter alia,*

processes of controlling cable head end processes and monitoring of those processes

and combined medium presentation, not suggested by '851, are further suggested bu

Yamane et al and '619. Yamane et al disclose a television broadcast system for

embedding network monitoring codes within a given line of VBI of the broadcast

"mass medium" programming. Yamane et al also disclosure, *inter alia,* embedding

control signals into a second/different line of VBI of the television programing so as

to provide additional control over the flow of the television programming through the

downstream affiliate stations . '619 suggest a radio and television broadcast system

in which control signals are embedded in the network radio/television programming

for the purpose of controlling the flow of the radio/television programming through

the plurality of affiliate stations. Hetrich discloses, *inter alia,* embedding control

signals used for identifying the portions of the network programing which are to be

recorded by the storage device of the affiliate stations for delayed re-broadcast.

Because Yamane et al suggest that it is desirable to have monitoring codes and

control codes within different scan lines of the same network television programming

broadcast for providing respective control over monitoring and controlling functions

of the television broadcast system; and because Yamane et al suggest implementing the circuitry needed to simultaneously encoded and embed two types of codes into the same TV broadcast (see figure 6.8 on page 71 of the translation), examiner concludes that it would have been obvious to have modified the encoder 12 of '851 to receive "control signals", e.g. in addition to "monitoring signals" already described by '851, and to have simultaneously encoded and embedded and received control signals and received monitoring signals into the same network television signal via summing circuit 14, e.g. the embedding of the signals inherently takes place at selected times which are determined by the location of horizontal lines into which said encoded signals were embedded. Taken together, these monitoring signals, and control signals correspond to instruction signals. '619 suggest embedding control codes of the type found in the above described modified '851 system, for controlling and automating the recording of selected portions of received network programming at the affiliate stations. By controlling the affiliate stations to record the portions of network programming for delayed broadcast, the control codes are effective to instruct the affiliate station to delay the network programming for some selected period of time. Hence, in view of '851 disclosure, examiner concludes it would have been obvious to one skilled in the art to have used the control codes/signals in the modified system of '851 for controlling and hence automating the '851 disclosed means for recording of the selected portions of network television programming at the affiliate stations.

18.   Pending claims of the group, 1-152, that are directed to, *inter alia*, processes

of controlling subscriber station processes and monitoring of those processes and of

combined medium presentation and processes, are rejected under 35 U.S.C. 103(a) as

being unpatentable over either one of the common subject matter suggested by

Campbell et al (WO81/02961, aban. Parent Appl. No. 135,987; U.S. patent

4,536,791))('791 is specifically referenced for convenience) in view of at least one or

more of: Breeze "Television Line 21 Encoded Information And It's Impact on

Receiver Station Design"; Schnee (U.S. patent no. 4,290,142) ('142); and Zaboklicki

(DE 2,904,891)('891).

Regarding Campbell et al: the PCT publication date, noted on the front page

of Campbell et al is October 15, 1981. For this reason, Campbell et al are considered

a 102a reference. However, the effective priority of the material sourced for purposes

of this rejection dates to the filing of the corresponding abandoned C.I.P. grant parent

application no. 135,987, filed March 31, 1980. What was added in the C.I.P. of issue,

is disclosure corresponding to Figures 2a, b, and 14-17 of the '791 patent. Because,

the rejection herein relies on Fig's 1, 2, and 3-13, and corresponding written

description and not Fig.'s 2a, b, and 14-17, the effective filing date of the teaching

subject matter relied upon for this rejection in the '791 patent is March 31, 1980. A

copy of the abandoned grand parent was provided in application 08/468,641.

Considering pending claims of the group, 1-152, that cover, *inter alia*,

processes of controlling subscriber station processes and monitoring of those

processes and of combined medium presentation and processes that are suggested by

Campbell et al. Campbell et al suggest the claims that cover an addressable cable

television control system controlling television program and data signal transmission

from the cable head end to the subscriber stations. The data signals include control

and text embedded in the vertical blanking interval. There is also suggested full

channel Teletext data in video line format which may be transmitted on dedicated text

channels with the modification of only head end processors. There are intelligent

converts at the subscriber locations for using the data signals to control access to the

system on the basis of channel, tier, of service , special event and programming. The

converter uses graphic display generator for generating display signals for the

combined medium presentation of text data on the television receiver and for

generation of predetermined messages for viewer concerned access, emergences, and

other functions. The converter processes text data, and selected full channel text data

transmitted in video line format. The keyboard of the subscriber provides different

functional inputs for interfacing with the system. The converter is interactive two

way for data acquisition and control. Figure 1 and it's written description suggest,

inter alia, the central data control at cable head end, and the combination of control

signals, instruction signals, audio programming, video programming. There is also

disclosed addressable converter and at the subscriber station having input. Figure 2

and it's written description suggest, *inter alia,* formatting at the cable head end of

data receiver from data sources, and various addressing control apparatus and

processes. Figure 2a-b and corresponding written description disclose, *inter alia,* the

packet length, and features of the video field line layout. Figure 3 and corresponding

written description disclose, *inter alia,* clocking control, local input, data storage, and

floppy disk storage medium, printer, generation of control data, connection to remote

control, and additional console inputs, and remote terminal and processes therefore.

Figure 4 and corresponding written description disclose, *inter alia,* digital control and

timing and processing and scrambling at the head end and processes thereof. Figure 6

and corresponding written description disclose, *inter alia,* various subscriber station

method and apparatus for receiving programming, tuning programming, detecting

programming, local inputting, descrambling and decrypting , memory, various input

means, and various methods and processes therefore. Figure 7 and corresponding

written description disclose, *inter alia,* the generation of graphics and video,, and

memory means, and processor means, and processes thereof. Figure 8 and

corresponding written description disclose, *inter alia,* level transition, analog

comparator, and processes for vertical interval data extraction, and generation, and

processing, for presenting. Figure 9-10 and corresponding written description

disclose, *inter alia,* subscriber station head end converter and television, remote

control, and security monitoring, and processes therefore. Figure 11 and

corresponding written description disclose, *inter alia*, data structure, for control

signals, and instruction signals, for control of the subscriber station and for control of

processing and for control of monitoring, and for control of combined medium

presentation. Figure 12 and corresponding written description disclose, *inter alia*,

processing and generation of combined medium presentation for audio, video,

graphics, and subscriber input, descrambling, and processing. Claims that cover

processes of controlling subscriber station processes and monitoring of those

processes and of combined medium presentation and processes that are not suggested

by Campbell et al are suggested by Breeze. For example, Breeze suggests a system

for transmission of accurate time information during the vertical interval and of

standard television broadcasts. The disclosure suggests implementation of digital

tuning, test signaling, facsimile, and other uses for transmission of digital encoding.

Figure 1 and it's written description disclose, *inter alia*, generation of timing

information. Figure 2 and it's written description disclose, *inter alia,* code format

having bits for identifying information type to follow, such as time, and text, and bits

containing time data, and channel codes. Figure 4 and it's written description

disclose, *inter alia,* process and method for detecting codes and decoding various

signaling. Figure 5 and it's written description disclose, *inter alia,* process and

method for numeric generation of time and channel display. Figures 6-7 and written

description disclose, *inter alia,* process and method for timing utilizing encoded

channel identification. Figure 8 and it's written description disclose, *inter alia,*

process and method for digital channel comparison and storing, and the column prior

to the conclusion suggests automatic programming and automatic tuning. Claims that

cover processes of controlling subscriber station processes and monitoring of those

processes and of combined medium presentation and processes that are not suggested

by Campbell et al and are not suggested by Breeze, are suggested by '142. For

example Schnee suggests, *inter alia,* an interactive cable television system having

combined medium presentation of data, audio, and video, which has been transmitted

on different channels of time, space, and frequency (see second to last paragraph).

'142 suggests combined medium presentation of a locally generated image with

video. There is also suggested a combined medium presentation of data and video.

And there is also suggested combined medium presentation of radio and television.

Claims that cover processes of controlling subscriber station processes and

monitoring of those processes and of combined medium presentation and processes

that are not suggested by Campbell et al and are not suggested by Breeze, are not

suggested by '142, are suggested by '891. For example, '891 suggests, inter alia, the

combined medium presentation and processing therefore, including the display of

portions of graphic presentation. Pending claims therefore covering combined

medium presentation of data and video would have been obvious, *inter alia,* for

providing cable subscribers with enhanced interactive processes including enhancing

conventional entertainment, providing useful information, and offering greater control

to the cable head end operators.

19.   Pending claims of the group, 1-152, that are directed to, *inter alia*, either

processes of controlling *affiliate* stations and processes and monitoring of those

processes and combined medium presentation or processes of controlling *subscriber*

stations and method and process for monitoring and providing combined medium

presentations, or both, that fall out each particular determined group members of the

group of claims described in rejection above, the groups are *provisionally* rejected

further in view of one or more of:

       -Hazelwood et al (US. Patent No. 4,025,851);(see reasoning and level of skill

       at '81 as discussed in rejection below and above);

       -The publication "System and Apparatus for Automatic Monitoring Control of

       Broadcast Circuits" by Yamane et al;(see reasoning and level of skill at '81 as

       discussed in rejection below and above);

       -Australian Patent document No. 74,619 to Hetrich;(see reasoning and level of

       skill at '81 as discussed in rejection below and above);

       -"A Public Broadcaster's View of Teletext in the United States", Gunn; (see

       discussion and reasoning given below);

-Master Control Techniques" by Marsden vol 9 of the "Journal of the

Television Society", '59; (see reasoning and level of skill at '81 as discussed

in rejection below and above);

-"The Automation of Small Television Stations" by Young et al vol 80 of the

"Journal of the SMPTE", Oct. '71; (see reasoning and level of skill at '81 as

discussed in rejection below and above);

-U.S. Patent 3,761,888 to Flynn;(see reasoning and level of skill at '81 as

discussed in rejection below);

-U.S. Patent 3,627,914 to Davis;(see reasoning and level of skill at '81 as

discussed in rejection below);

-"Microprocessor For CATV Systems" by Tunmann et al;;(see reasoning and

level of skill at '81 as discussed in rejection below);

-U.K. Patent 959,374 to Germany;(see reasoning and level of skill at '81 as

discussed in rejection below);

-"Automatic Control of Video Tape Equipment at NBC, Burbank", by Byloff,

'59; (see reasoning and level of skill at '81 as discussed in rejection below);

-"Video Banks Automate Delayed Satellite Programming", by Chiddix,

'78;(see rejections below);

-"The Digitrol 2 ~ Automatic VTR Programme Control", by Skilton, pages

60-61, of -"International Broadcast Engineer", 3/81;(see reasoning and level

of skill at '81 as discussed in rejection below);

-CATV Program Origination and Production, by Schiller et al, '79 (see 892);

(this reference merely sets forth, *inter alia,* in one place and in laymen terms,

what the level of skill in the art rejection above does in technical terms; so to

the extent the above/below rejection is too technical with respect to level of

skill in the art at '79, the level is described herein in laymen terms for

purpose of clarity);

-Television Production Handbook, by Zettl, Second Edition, '69; (see

reasoning and level of skill at '81 as discussed in rejection below);

-Vikene, WO 80/02093; (Vikene suggests, *inter alia,* a method of transmitting

from a broadcaster in addition to the information signal remote control

signals, in order to on the receiving side, corresponding to announced

programs from the broadcaster which are provided with coded markings, to

effect recording of the information on a tape or video recorder. Which

markings are also recorded and the recorder is programmable in

accordance with the announced programs, so as to be reproduced at a desired

time using the recorded markings and the program set in the recorder to sort

out the desired information and standard stop the recorder; hence to the extent

the above and below discussions do not address the particular determined

group members of the group of claims, and to the extent the difference is met

with the above Vikene disclosure, it would have been obvious to one having

ordinary skill in the art for the convenience gained in the recording of the

information on a tape or video recorder);

-Greenberg U.S. patent 4,547,804;(see rejections above considering the

benefit of greater network operator control);

-Jeffers et al U.S. patent 4,739,510;(see rejections above considering the

benefit of the ability to, *inter alia*, decrypt and hence secure programming);

-"Electronic Image and Tone Return Equipment With Switching System and

Remote Control Receiver for Television Decoder" by Werner Diederich DT

23 56 969 A1; (Diederich suggests, *inter alia,* an electronic image and tone

return equipment with switching system and remote control receiver for

television decoder. hence to the extent the above and below discussions do not

address the particular determined group members of the group of claims, and

to the extent the difference is met with the above Diederich disclosure, it

would have been obvious to one having ordinary skill in the art for the

convenience gained);

-Campbell et al WO81/02961; to the extent that the above and below do not

address this group of claims and to the extent that Campbell et al do (see

above), it would have been obvious for the benefits described above including, *inter alia*, enhanced subscriber station services);

-Campbell et al Aban. Parent Appl. No. 135,987; (same as WO81/02961);

-Campbell et al U.S. patent 4,536,791('791); (same as WO81/02961);

-"Automatic Storage and Retrieval of Videotaped Programs", by Kazama et al, 4/79;(Kazama et al suggests, *inter alia,* a fully automatic storage receive of Videotaped Programs that is computer controlled, so as to constitute tape-traffic and handling system. hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Kazama et al disclosure, it would have been obvious to one having ordinary skill in the   art for the convenience gained);

-"Code accompanying TV program turns on video cassette recorder in proposed scheme", by J Gosch, vol 54 no. 3, February 10, 1981; (Gosch teach, *inter alia,* code accompanying TV programming for turning on a video cassette recorder for delayed or altered schedule programming; as well as for unscheduled broadcasts and for alerting emergencies and providing updates. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent

the difference is met with the above Gosch disclosure, it would have been

obvious to one having ordinary skill in the art for the convenience gained);

-"An Automated Programming Control System For Cable TV", by Stern (80);

(Stern suggests, *inter alia*, an automated programming control system for

Cable TV having a machine control interface unit containing special circuits

for sensing control track pulses, so the system can accurately search for

different program material and commercials recorded on one tape; also there is

suggested pre-roll of a tape to a specific program; and rewind to a previous

segment...so as to "essentially" be "random-access" to the contents of the

video tape, under full system control. Hence to the extent the above and below

discussions do not address the particular determined group members of the

group of claims, and to the extent the difference is met with the above Stern

disclosure, it would have been obvious to one having ordinary skill in the art

for the convenience);

-"Television Line 21 Encoded Information and It's Impact on Receiver

Design", Breeze, Nov. '72; (see rejection above. Hence, to the extent that the

above and below discussions do not suggest the particular determined group

members of the group of claims, and to the extent that it is met by Breeze (see

above) it would have been obvious for the convenience gained);

-"Automatic Switching in the CBC - An Update" by M.W.S. Barlow (Sept.

76); (suggests, *inter alia*, **network controlled** automatic switching process.

Hence, to the extent that the above and below discussions do not suggest the

particular determined group members of the group of claims, and to the extent

that it is met by the Barlow disclosure, it would have been obvious for   the

convenience gained);

-"Transmission no Alphanumeric Data by Television", by Millar et al 1 370

535, GB-1974-10; (see discussion and reasoning below);

-Galumbeck et al (U.S. patent no. 4,725,886); (to the extent that the above and

below discussion does not suggest the particular determined group members

of the group of claims, and to the extent that the difference is met by

Galumbeck et al, it would have been obvious for the convenience gained);

-CBS/CCETT North American Broadcast Teletext Specification, 5/81;

(suggests, *inter alia*, captioning transmitted to a decoder for superimposing

over the program video at a pre-designated time, and selecting a classification

of captions so as to be displayed over program video. Hence, to the extent

that the above and below do not suggest the particular group of claims and to

the extent it is met by the CBS/CCETT disclosure, it would have been obvious

for the convenience gained);

-Zaboklicki (DE 2,904,891); (to the extent that the discussion above and

bellow does not suggest the particular determined group members of the group

of claims, and to the extent it is met bo Zabolicki, it would have been obvious

for the benefit of the convenience gained);

-Nagel (U.S. patent no. 4,064,490); (suggests, *inter alia*, methods and

apparatus for the reception, and processing of computer applications. Hence

to the extent the above and below discussions do not address the particular

determined group members of the group of claims, and to the extent the

difference is met with the above Zaboklicki disclosure, it would have been

obvious for the benefit of the convenience gained);

-Kakihara et al (U.S. patent no. 4,251,691);(suggests, *inter alia*, a center-to-

end type information service system utilizing the public telephone networks

that are fundamental communication media of nation-wide scale in which

desired information is requested from the terminal side to the center by means

of a telephone set of keyboard and then delivered to and received by a TV

receiver, wherein a part of the center functions is transferred together

with the   exchange function to a subscriber located near the terminal so that the

length transmission path connecting the center to terminals becomes

shorter   and the cost of the whole system can be reduced. Hence, to the extent

the   above and below discussions do not address the particular determined group

members of the group of claims, and to the extent the difference is met with

the above Kakihara disclosure, it would have been obvious to one having

ordinary skill in the art for the convenience gained);

-Hedger et al (Telesoftware-Value Added Teletext); (suggests, *inter alia*,

broadcast software and subscriber station computing apparatus having input

and output device for interactive user applications. Hence, to the extent the

above and below discussions do not address the particular determined group

members of the group of claims, and to the extent the difference is met with

the above Kakihara disclosure, it would have been obvious to one having

ordinary skill in the art for the convenience gained);

-"The Vertical Interval: A General-Purpose Transmission Path", Ted V.

Anderson; (See discussion and reasoning below);

"A Public Broadcaster's View of Teletext in the United States", Gunn; (see

discussion and reasoning given below);

-"Automatic Program Recording System, Gaucher, '75; (suggests, *inter alia*,

an automatic program recording system. Hence, to the extent the above and

below discussions do not address the particular determined group members of

the group of claims, and to the extent the difference is met with the above

Gaucher disclosure, it would have been obvious to one having ordinary skill

in the art for the convenience gained);

-U.S. patent 4,290,142, to Schnee et al (to the extent that the above and below discussion does not suggests the particular determined group members of the group of claims, and to the extent that Schnee et al do, it would have been obvious for the benefit of the convenience gained).

For example, to the extent that pending claims of the group, 1-152, that are directed to, *inter alia,* processes of controlling cable head end processes and monitoring of those processes and combined medium presentation, and controlling subscriber station processes and monitoring of those processes, and for combined medium presentation, are not suggested by the above, they cover subject matter known as the *'81 level of skill in the art* (11/3/81) so that the combination would be obvious for implementing, *inter alia*, what was well known for the benefit of increasing network automation and hence provide the network control with more efficient means with which to operate and control said network. The following discussion is provided to establish the **'level of skill in the art'** which existed at the time of applicants' alleged invention ('81), such skill level sets forth the context in which the applied art of record must be reviewed:

1. The examiner notes that local television broadcast stations, which only served small regional areas of a country (e.g. the USA), often lacked the financial resources required to create enough original television

programing to fill their daily broadcast schedules. Thus, these local

television stations became *"affiliates"* of a national television

broadcast network (e.g. NBC, ABC, CBS, etc,...) whereby the

national television network created original network television

programming which could be transmitted to, and commonly

rebroadcast by, all of the local affiliate stations. This arrangement

allowed the cost of creating such original programming to be divided

amongst the affiliate stations thereby reducing the cost to any one of

the affiliates.[9]

2.   While, in practice, it was feasible to fill the affiliate stations' entire

local broadcast schedules with network programming, such was known

not to have been desirable. Specifically, there still remained a need to

supplement said network programming with locally originated

programming tailored specifically to the needs and interests of the

local audiences (e.g. local news programs, local commercials, etc,...).[10]

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[9]See, the first 23 lines In the full paragraph on page 85 of the article "Master Control Techniques" by <u>Marsden</u> which was published in volume 9 of the "Journal of the Television Society" in 1959.

[10] Note the first 23 lines in the second full paragraph of page 85 of the article "Master Control Techniques" by <u>Marsden</u> which was published in volume 9 of the "Journal of the

3.   To accomplish the above, an arrangement was established in which a

national broadcast station would broadcast network programming to

all of it's affiliate stations in accordance with a strict

network broadcast schedule. This strict network broadcast schedule

included scheduled "breaks" in the network programming which were

then made available to the local affiliate stations for the purpose of

inserting locally originated programming.[11] This locally originated

programming was known to have included previously broadcast

network programming which had been recorded for delayed

rebroadcast.[12] The resulting combined programming was then

broadcast to the local audiences of the affiliate stations.

Television Society" in 1959.

        Note: lines 2-9 in the second column on page 806 of the article "The Automation Of Small Television Stations" by Young et al which was published in volume 80 of the "Journal of the SMPTE" in October of 1971.

[11] Note the last 11 lines on page 810 of the article ... "The Automation Of Small Television Stations" by Young et al, which was published in volume 80 of the "Journal of the SMPTE" on October of 1971.

[12] See lines 25-41 in column 4 of U.S. Patent 4,025,851 to Hazelwood et al. which was published on May 24, 1977.

4.   Early on, the local affiliate stations produced and inserted their own

local programming into the network programming via a switching

network which was controlled manually by local technicians.

However, as technology progressed, methods for automating various

aspects of the program insertion/switching process developed Such

developments included:

1) The development of automatic scheduling computers which could

be programmed to execute a list of scheduled programming events

whereby the list of events automatically controlled tile sequence in

which scheduled programming was produced and broadcast from a

respective broadcast. Such computers were used to automate both the

network television stations and affiliate television stations .[13]

2) The development of automated program cuing systems which

include: equipment located at the national network for embedding

---

[13] Note: the last 11 lines on page 810 of the article "The Automation Of Small Television
Stations" by Young et al. which was published in volume 80 of the "Journal of the SMPTE" in
October of 1971.
Note: U.S. Patent # 3,761,888 to Flynn which was published on 9/25/73.
Note: U.S. Patent # 3,627,914 to Davies which was published on 12/14/71.
Note: the publication "Microprocessor For CATV Systems" by Tunmann et al. Which was
Published by the Tele-Engineering Corp on 4/30/1978.

cuing signals into the broadcasted network programming whereby

said cuing signals identified the beginning and the end of each

scheduled "break" in network programming, and equipment located at

the affiliate stations which used the embedded cuing stations to

determined the respective beginning and the respective end of each

scheduled network "break" and, based on this determination,

automatically cause its own scheduled local programming to be

inserted into said "breaks" prior to "re-broadcast".[14]

5.   Because ones of the affiliate stations were located in different time

zones, equipment was required to compensate the broadcasted network

programming for these tine zone differences, i.e. if the same network

programming was to have been broadcasted at the same local time

throughout the entire country. This compensation was accomplished

by delaying the broadcasted network programming which was

provided to a given one of the affiliate stations, via a network of

recording devices, as a function of the time zone in which the given

---

[14] See: Australian Patent Document S.N. 074,619 by <u>Hetrich</u> which was published April 29, 1976.

See: U.K. Patent Document S.N. 959,374 by <u>Germany</u> which was published May 27, 1964.

affiliate station was located. Early on, due to the high cost of this

delay equipment, compensation was provided only at the central

network station.[15] But subsequently, as the cost of the delay equipment

came down and as the use of highly expensive satellite transmission

paths increased, said delay equipment began be located within ones

of the affiliate station locations.[16] In either of these situations, when

network programming was to be delayed in this manner, it was

understood that any "program related data" that was carried with the

network programming (e.g. such as the network cueing signals,

network program monitoring codes; etc,...) also had to be delayed by

the delay equipment in order to have maintained the precise timing

---

[15] Note the article "Automatic Control of Video Tape Equipment at NBC, Burbank" by Byloff which was published by the National Broadcasting Company, Inc. in 1959.

[16]See: the publication "Video Banks Automated Delayed Satellite Programming" by

Chiddix which was published in 1978.

See: the publication "The Digitrol 2 ~ Automatic VTR Programme Control" by Skilton which was published on pages 60-61 of the "International Broadcast Engineer" in March of 1981.
Note: lines 25-41 in column 4 of U.S. Patent 4,025,851 to Hazelwood et al. which was published on May 24, 1977.

relationship of such program related data with the said network

programming.[17]

Moreover, consider the state of television before the parent '81 disclosure...

The following discussion has been provided to emphasize the state of the

television/radio broadcast art which existed at the time of applicants' alleged

invention and, therefore, to further exemplify the context in which the applied prior

art of record must be viewed. Support for this discussion is derived from the

following prior art: 1) the publication "System and Apparatus for Automatic

Monitoring Control of Broadcast Circuits" by Yamane et al; 2) the Australian Patent

document No. 74, 619 to Hetrich; 3) the publication "The Vertical Interval: A

General-Purpose Transmission Path" by Anderson; and 4) the British patent

document No. 959,274 to Germany.

A) Contrary to the arguments presented by applicants in co-pending

applications (e.g.S.N. 113,329)[18], it is maintained that the body of art

pertaining to the broadcast of television programming the body of art

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[17]See: the first 7 lines in the first full paragraph of the third column on page 39 of the publication "Video Banks Automate Delayed Satellite Programming" by Chiddix which was published in 1978.
    Note: U.S. Patent 4,025,851 to Hazelwood et al. Which was published on May 24, 1977.

[18]The Examiner notes that application S.N. 113,329 has already been cited in the record and therefore its citation by Examiner herein is not prohibited.

pertaining to the broadcast of radio programming were, and still are,

analogous arts. To suggest otherwise is to portray an unrealistically low level

of skill in the art. The following fats provide evidence as to the analogous

nature of these two arts:

> 1. First, it is noted that radio programming and television
>
> programming were communicated through radio and television
>
> distribution networks in the same basic way/format. More
>
> specifically, both radio/television distribution networks
>
> operated to produce, sequence and distribute radio/television
>
> programming to a plurality of household `radio/television
>
> receivers based on predetermined radio/television broadcast
>
> schedules. In fact, the definition of the word program, as it
>
> pertains to the broadcast environment, was/is: "a scheduled
>
> radio or television show".
>
> 2 By the fact that the actual configurations of the radio and
>
> television networks themselves mirrored each other element
>
> for element. For example, both systems comprised
>
> national/network stations and affiliated local/regional
>
> stations wherein the local/regional stations operated to
>
> selectively rebroadcast network programming, or to broadcast

locally produced programming in place of the network programming, to said household receivers. Almost the only difference between the configurations of the radio and television networks was that the circuitry needed to implement the television network was of a greater bandwidth than that of the radio network (e.g. the television network used VTRs in places where the radio network used ATRs);

3. By the fact that the prior art of record shows that, at the time of Applicants' alleged invention, those of ordinary skill in the art themselves understood radio/television distribution networks to be "analogous arts". For example, this fact is clearly reflected in the teaching of Hetrich that his disclosed control signal distribution circuitry, while described in detail with respect to radio broadcast networks, could likewise have been used within television broadcast networks (see: the first 4 lines on page 2 of the Hetrich document).

B)   Television and radio broadcast networks, which comprised a plurality of local/regional broadcast stations affiliated with a respective central/national

broadcast station, were notoriously well known in the art at the time of

applicants' alleged invention. The central/national broadcast station of these

broadcast networks operated to create national television/radio programming

and to broadcast said created programming to ones of its affiliate broadcast

stations. Said ones of the affiliate stations received the broadcasted network

television/radio programming and then either rebroadcast said received

network programming or broadcast locally produced commercials/programs in

place of said received network programming. The programming that was

broadcast from the ones of the affiliate stations were received by a plurality of

television receivers located at the households within the local region served by

the affiliates, and/or were received and processed by additional ones of said

affiliate stations.

C) In order to 1) reduce the operating costs of said television and radio

broadcast networks, 2) eliminate man made errors in said television and radio

networks; and 3) increase the efficiency in flow of programming in said

television and radio networks (i.e. the "motion functions"), it became a

desirable trend in the television/radio broadcast industries to have

"automated" as much of the broadcast network process as was economically

beneficial; e.g. where the term "automated" referred to the unmanned

operation of network processes by machines instead of station personal (note

lines 7-22 on page 5 of the Yamane et al translation). Early on, the process

that was targeted for automation involved: the monitoring of broadcast

programming for the purpose of determining faults/failures in the network;

the monitoring of broadcasted programming for the purpose of determining

subsequent program switching opportunities; the control of program flow and

switching according to "confirmed program schedules"; etc, ... (note lines 9-

18 on page 6 of Yamane et al translation).

D)One notoriously well known way of automating many of the processes

performed by television/radio networks, was through the use of embedded

"identification information signals" and "control information signals" within

the broadcast network programming such that said embedded signals were

used to monitor and identify the network programming being broadcast and

were used to provide control over program switching operations of said

affiliate stations (note lines 1-6 on page 2 of the Yamane et al translation;

lines 11-27 on page 13 and lines 1-21 on page 14 of the Yamane et al

translation; lines 16-23 on page 15 of the Yamane et al translation; the last six

lines on page 18 of the Yamane et al translation; figure 1 of Hetrich; lines 1-

10 on page 2 of Hetrich; the last 9 lines on page 10 of Hetrich; the abstract on

page 77 of <u>Anderson</u>; and the first full paragraph under the heading

"Introduction" on page 77 of <u>Anderson</u>). It is noted that at least the

publication of <u>Anderson</u> recognized the fact that the versatility of this type of

system automation could be greatly expanded if the embedded signals were

capable of being addressed to a specific ones, and/or to specific ones, of the

affiliate stations (note: the first three lines under the heading "Applications"

on page 80 of <u>Anderson</u>; and lines 1-12 under the heading "Conclusion" on

page 82 of <u>Anderson</u>).

Double Patenting

20.   Conflicts exist between claims of the following related co-pending

applications which includes the present application:

#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659

19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711

79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248
112	449263	113	449281	114	449291
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450680	135	451203
136	451377	137	451496	138	451746

139	452395	140	458566	141	458699
142	458760	143	459216	144	459217
145	459218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668
169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355

199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864

259	478908		260	479042		261	479215
262	479216		263	479217		264	479374
265	479375		266	479414		267	479523
268	479524		269	479667		270	480059
271	480060		272	480383		273	480392
274	480740		275	481074		276	482573
277	482574		278	482857		279	483054
280	483169		281	483174		282	483269
283	483980		284	484275		285	484276
286	484858		287	484865		288	485282
289	485283		290	485507		291	485775
292	486258		293	486259		294	486265
295	486266		296	486297		297	487155
298	487397		299	487408		300	487410
301	487411		302	487428		303	487506
304	487516		305	487526		306	487536
307	487546		308	487556		309	487565
310	487649		311	487851		312	487895
313	487980		314	487981		315	487982
316	487984		317	488032		318	488058

319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491
328	485773	329	113329		

21. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. The *formerly* attached Appendix provides clear evidence that such conflicting claims exist between the 329 related co-pending applications identified above. However, an analysis of all claims in the 329 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

In order to resolve the conflict between applications, applicant is required to either:

(1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 329 applications, or;

(2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications. Applicant should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;

(3) resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 329 applications (note: the five examples in the *formerly* attached **Appendix** are merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement).

22.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent

the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).In re Schneller, 397 F.2d 350, 158 U.S.P.Q. 210 (C.C.P.A. 1968).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

23.	All pending claims are rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over at least one or more of:

U.S. Patent No. 4,694,490 ('490);

U.S. patent no. 4,704,725 ('725);

U.S. Patent No. 4,965,825 ('825);

U.S. patent no. 5,109,414 ('414),

U.S. patent no. 5,233,654 ('654),

U.S. patent no. 5,335,277 ('277);

in view of at least one or more of:

-Hazelwood et al (US. Patent No. 4,025,851);(see reasoning and level of skill

at '81 as discussed in rejection below and above);

-The publication "System and Apparatus for Automatic Monitoring Control of

Broadcast Circuits" by Yamane et al;(see reasoning and level of skill at '81 as

discussed in rejection below and above);

-Australian Patent document No. 74,619 to Hetrich;(see reasoning and level of

kill at '81 as discussed in rejection below and above;

-"A Public Broadcaster's View of Teletext in the United States", Gunn; (see

discussion and reasoning given below);

-Master Control Techniques" by Marsden vol 9 of the "Journal of the

Television Society", '59; (see reasoning and level of skill at '81 as discussed

in rejection below and above);

-"The Automation of Small Television Stations" by Young et al vol 80 of the

"Journal of the SMPTE", Oct. '71; (see reasoning and level of skill at '81 as

discussed in rejection below and above);

-U.S. Patent 3,761,888 to Flynn;(see reasoning and level of skill at '81 as

discussed in rejection below);

-U.S. Patent 3,627,914 to Davis;(see reasoning and level of skill at '81 as

discussed in rejection below);

-"Microprocessor For CATV Systems" by Tunmann et al;;(see reasoning and

level of skill at '81 as discussed in rejection below);

-U.K. Patent 959,374 to Germany;(see reasoning and level of skill at '81 as

discussed in rejection below);

-"Automatic Control of Video Tape Equipment at NBC, Burbank", by Byloff,

'59; (see reasoning and level of skill at '81 as discussed in rejection below);

-"Video Banks Automate Delayed Satellite Programming", by Chiddix,

'78;(see rejections below);

-"The Digitrol 2 ~ Automatic VTR Programme Control", by Skilton, pages

60-61, of -"International Broadcast Engineer", 3/81;(see reasoning and level

of skill at '81 as discussed in rejection below);

-CATV Program Origination and Production, by Schiller et al, '79 (see 892);

(this reference merely sets forth, *inter alia,* in one place and in laymen terms,

what the level of skill in the art rejection above does in technical terms; so to

the extent the above/below rejection is too technical with respect to level of

skill in the art at '79, the level is described herein in laymen terms for

purpose of clarity);

-Television Production Handbook, by Zettl, Second Edition, '69; (see

reasoning and level of skill at '81 as discussed in rejection below);

-Vikene, WO 80/02093; (Vikene suggests, *inter alia,* a method of transmitting

from a broadcaster in addition to the information signal remote control

signals, in order to on the receiving side, corresponding to announced

programs from the broadcaster which are provided with coded markings, to

effect recording of the information on a tape or video recorder. Which

markings are also recorded and the recorder is programmable in

accordance with the announced programs, so as to be reproduced at a desired

time using the recorded markings and the program set in the recorder to sort

out the desired information and standard stop the recorder; hence to the extent

the above and below discussions do not address the particular determined

group members of the group of claims, and to the extent the difference is met

with the above Vikene disclosure, it would have been obvious to one having

ordinary skill in the art for the convenience gained in the recording of the

information on a tape or video recorder);

-Greenberg U.S. patent 4,547,804;(see rejections above considering the

benefit of greater network operator control);

-Jeffers et al U.S. patent 4,739,510;(see rejections above considering the

benefit of the ability to, *inter alia*, decrypt and hence secure programming);

-"Electronic Image and Tone Return Equipment With Switching System and

Remote Control Receiver for Television Decoder" by Werner Diederich DT

23 56 969 A1;

(Diederich suggests, *inter alia,* an electronic image and tone return equipment

with switching system and remote control receiver for television decoder.

hence to the extent the above and below discussions do not address the

particular determined group members of the group of claims, and to the extent

the difference is met with the above Diederich disclosure, it would have been

obvious to one having ordinary skill in the art for the convenience gained);

-Campbell et al WO81/02961; to the extent that the above and below do not

address this group of claims and to the extent that Campbell et al do (see

above), it would have been obvious for the benefits described above including,

inter alia, enhanced subscriber station services);

-Campbell et al Aban. Parent Appl. No. 135,987; (same as WO81/02961);

-Campbell et al U.S. patent 4,536,791('791); (same as WO81/02961);

-"Automatic Storage and Retrieval of Videotaped Programs", by Kazama et

al, 4/79;(Kazama et al suggests, *inter alia,* a fully automatic storage receive of

Videotaped Programs that is computer controlled, so as to constitute tape-

traffic and handling system. hence to the extent the above and below

discussions do not address the particular determined group members of the

group of claims, and to the extent the difference is met with the above Kazama

et al disclosure, it would have been obvious to one having ordinary skill in

the art for the convenience gained);

-"Code accompanying TV program turns on video cassette recorder in

proposed scheme".

by J Gosch, vol 54 no. 3, February 10, 1981; (Gosch teach, *inter alia,* code accompanying TV programming for turning on a video cassette recorder for delayed or altered schedule programming; as well as for unscheduled broadcasts and for alerting emergencies and providing updates. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Gosch disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"An Automated Programming Control System For Cable TV", by Stern (80); (Stern suggests, *inter alia,* an automated programming control system for Cable TV having a machine control interface unit containing special circuits for sensing control track pulses, so the system can accurately search for different program material and commercials recorded on one tape; also there is suggested pre-roll of a tape to a specific program; and rewind to a previous segment...so as to "essentially" be "random-access" to the contents of the video tape, under full system control. Hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Stern disclosure, it would have been obvious to one having ordinary skill in the art for the convenience);

-"Television Line 21 Encoded Information and It's Impact on Receiver

Design", Breeze, Nov. '72; (see rejection above. Hence, to the extent that the

above and below discussions do not suggest the particular determined group

members of the group of claims, and to the extent that it is met by Breeze (see

above) it would have been obvious for the convenience gained);

-"Automatic Switching in the CBC - An Update" by M.W.S. Barlow (Sept.

76); (suggests, *inter alia*, **network controlled** automatic switching process.

Hence, to the extent that the above and below discussions do not suggest the

particular determined group members of the group of claims, and to the extent

that it is met by the Barlow disclosure, it would have been obvious for the

convenience gained);

-"Transmission no Alphanumeric Data by Television", by Millar et al 1 370

535, GB-1974-10; (see discussion and reasoning below);

-Galumbeck et al (U.S. patent no. 4,725,886); (to the extent that the above and

below discussion does not suggest the particular determined group members

of the group of claims, and to the extent that the difference is met by

Galumbeck et al, it would have been obvious for the convenience gained);

-CBS/CCETT North American Broadcast Teletext Specification, 5/81;

(suggests, *inter alia*, captioning transmitted to a decoder for superimposing

over the program video at a pre-designated time, and selecting a classification

of captions so as to be displayed over program video. Hence, to the extent

that the above and below do not suggest the particular group of claims and to

the extent it is met by the CBS/CCETT disclosure, it would have been obvious

for the convenience gained);

-Zaboklicki (DE 2,904,891); (to the extent that the discussion above and

bellow does not suggest the particular determined group members of the group

of claims, and to the extent it is met bo Zabolicki, it would have been obvious

for the benefit of the convenience gained);

-Nagel (U.S. patent no. 4,064,490); (suggests, *inter alia*, methods and

apparatus for the reception, and processing of computer applications. Hence

to the extent the above and below discussions do not address the particular

determined group members of the group of claims, and to the extent the

difference is met with the above Zaboklicki disclosure, it would have been

obvious for the benefit of the convenience gained);

-Kakihara et al (U.S. patent no. 4,251,691);(suggests, *inter alia*, a center-to-

end type information service system utilizing the public telephone networks

that are fundamental communication media of nation-wide scale in which

desired information is requested from the terminal side to the center by means

of a telephone set of keyboard and then delivered to and received by a TV

receiver, wherein a part of the center functions is transferred together with the

exchange function to a subscriber located near the terminal so that the

length transmission path connecting the center to terminals becomes shorter

and the cost of the whole system can be reduced. Hence, to the extent the

above and below discussions do not address the particular determined group

members of the group of claims, and to the extent the difference is met with

the above Kakihara disclosure, it would have been obvious to one having

ordinary skill in the art for the convenience gained);

-Hedger et al (Telesoftware-Value Added Teletext); (suggests, *inter alia*,

broadcast software and subscriber station computing apparatus having input

and output device for interactive user applications. Hence, to the extent the

above and below discussions do not address the particular determined group

members of the group of claims, and to the extent the difference is met with

the above Kakihara disclosure, it would have been obvious to one having

ordinary skill in the art for the convenience gained);

-"The Vertical Interval: A General-Purpose Transmission Path", Ted V.

Anderson; (See discussion and reasoning below);

"A Public Broadcaster's View of Teletext in the United States", Gunn; (see

discussion and reasoning given below);

-"Automatic Program Recording System, Gaucher, '75; (suggests, *inter alia*,

an automatic program recording system. Hence, to the extent the above and

below discussions do not address the particular determined group members of

the group of claims, and to the extent the difference is met with the above

Gaucher disclosure, it would have been obvious to one having ordinary skill

in the art for the convenience gained);

-U.S. patent 4,290,142, to Schnee et al (to the extent that the above and below

discussion does not suggests the particular determined group members of the

group of claims, and to the extent that Schnee et al do, it would have been

obvious for the benefit of the convenience gained).

See Appendix A.

It is apparent that no pending claim is more than an obvious variation of the

patented claims when the teachings discussed throughout this action are considered.

Examiner submits Appendix A for illustrative purposes. *Assuming arguendo*, that

applicants patents, alone, do not cover the pending claims, they are clearly not

independent and distinct when the body of prior art described in this action, *inter alia*,

is considered. Here, the differences, to the extent they are supported by '81 or are at

least obvious over what '81, *in fact*, supports, i.e. what applicants, in fact, possessed

as well as the affiliated cable head end control they are, for the benefits described

above, suggested by the prior art (note: Appendix A is merely illustrative of the

overall problem).

Specification

24.   It is recognized that applicants have been filing amendments to the co-pending

instant disclosure page's 37, even though it is now more than 18 years after the

priority benefit claimed under Section 120. Applicants have identified the '87

disclosed page 14 line 32 through page 15 line 6 as their sole basis of support for this

very late modification. However, the sole *basis* offered, is rejected. The added

material which was not necessarily fully supported by at least one of the intersection

of the '87 and '81 disclosures, and the original '87 disclosure is the:

substitution of --units-- for "words" ('87, page 37, line 24); and

substitution of --words-- for "units" ('87, page 37 line 25).

Oath/Declaration

25.   The oath or declaration is defective. A new oath or declaration in compliance

with 37 CFR 1.67(a) identifying this application by application number and filing

date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration in a
continuation-in-part application filed under the conditions specified in 35
U.S.C. 120 which discloses and claims subject matter in addition to that
disclosed in the prior copending application, acknowledges the duty to
disclose to the Office all information known to the person to be material to
patentability as defined in 37 CFR 1.56 which occurred between the filing

date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Examiner makes the finding of fact for written description, that applicants have filed yet another continuation-in-part when they filed the instant disclosure under 35 U.S.C. 120, and as a consequence they need to file a new oath or declaration. The circumstance may be unintended or may be intended, *but it is a fact*, and is nevertheless, understood to be the law. For ex,

See In re Lund, 376 F.2d 982, 153 U.S.P.Q. 624 (C.C.P.A. 1967), In Lund, the C.C.P.A. stated:

> As the expression itself implies, the purpose of "incorporation by reference" is to make one document become a part of another document by referring to the former in the latter in such a manner that it is apparent that **the cited document is part of the referencing document as if it were fully set out therein...** (emphasis added).

Lund, 376 F.2d at 1370-71.

It is understood that judge made *law* holds that when applicants supplemented their disclosure on the date of filing their instant continuation under Section 120 by *inserting into page 1* of the instant continuation one of the other co-pending applications of the same chain of co-pending applications and specifically 'incorporating-by-reference' co-pending application 08/113,329('329), "in it's entirety" into the instant disclosure, applicants have **in fact** *conveyed* the instant disclosure as including the entire content of co-pending application 08/113,329. This

incorporation "in it[']s entirety" would necessarily include, *inter alia*, each piece of prior art cited therein.

It appears there is corroboration in the record that it was applicants' intent to accomplish inserting paper no 21, of '329, into instant page 1 through the use of incorporation-by-reference "in it[']s entirety". Since such an incorporation-by-reference "in it[']s entirely" serves to bring paper no. 21, then such an incorporation-by-reference necessarily brings in *all* of the contents of the identified application through the use of the term "in it[']s entirety".

For example, it is recognized that even though applicants' representative's intention, *under Section 120*, may have merely been to include at least the paper no. 21 of that document, he, *under Section 120 in fact*, chose to insert the "entirety" of the '329 contents into page 1. That is, even though applicants' representative could have included paper 21 into a PTO Form 1449, or merely 'incorporated it by reference' *into an response*, he did not.

Conclusion

With regard to future interviews, **M.P.E.P. 713.03 is hereby called to applicants attention.**

26.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to *William Luther* whose telephone number is *(703)*

308-6609. The examiner can normally be reached on Monday through Friday from 9:30 am to 3:00 pm.

27.   If attempts to reach the examiner by telephone are unsuccessful, supervisor Andrew Faile can be reached at *(703) 305-4380*.

28.   Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is *(703) 305-3900*.

William Luther
Primary Examiner
March 24, 2000

APPENDIX B

	ALLEGED "GROUP"	ACTIVE	INACTIVE	CONSOLIDATION STATUS OF ACTIVE CASE
1	ADVT	n/a	n/a	n/a
2	ASCO	n/a	n/a	n/a
3	ASRE	441,701	441,027	CONSOLIDATED
4	BCON	473,484	440,837	CONSOLIDATED
5	BUDG	n/a	n/a	n/a
6	CHAN	n/a	n/a	n/a
7	CLER	n/a	n/a	n/a
8	COMB	466,894	469,078	CONSOLIDATED
9	DATA	397,636	441,996	CONSOLIDATED
10	DECR	449,263	449,431	CONSOLIDATED
11	DIGI	435,757	478,794	CONSOLIDATED
12	DOWN	470,051	469,106	NONE TO DATE
13	EMBD	n/a	n/a	n/a
14	ERRO	n/a	n/a	n/a
15	FANA	n/a	n/a	n/a
16	FCOM	474,139	441,880	NONE TO DATE
17	FNAV	437,864	444,756	NONE TO DATE
18	FNET	488,439	487,893	CONSOLIDATED
19	HEAD	442,335	442,165	NONE TO DATE
20	HOST	437,791	438,206	CONSOLIDATED
21	I2CM	446,431	437,045	CONSOLIDATED
22	I2CR	486,258	447,621	CONSOLIDATED
23	I2GE	511,491	438,659	NONE TO DATE
24	I2GR	437,635	441,577	NONE TO DATE
25	I2RE	487,851	483,174	CONSOLIDATED
26	IMAG	n/a	n/a	n/a
27	INTE	470,571	471,024	CONSOLIDATED
28	METE	452,395	483,980	CONSOLIDATED
29	MICR	n/a	n/a	n/a
30	MKTR	474,964	480,058	CONSOLIDATED
31	MSG	n/a	n/a	n/a
32	MSTA	438,216	483,269	NONE TO DATE
33	MULT	487,526	437,044	CONSOLIDATED
34	NAUT	477,805	437,937	CONSOLIDATED
35	NAVI	459,216	480,383	CONSOLIDATED
36	NCOM	n/a	n/a	n/a
37	NECA	475,342	445,290	CONSOLIDATED
38	NGEN	n/a	n/a	n/a
39	OPNS	442,383	488,620	NONE TO DATE
40	PARA	488,378	477,564	NONE TO DATE
41	POLI	n/a	n/a	n/a
42	PROB	n/a	n/a	n/a
43	RCOM	449,281	449,800	CONSOLIDATED
44	RECO	n/a	n/a	n/a
45	REST	498,022	442,335	NONE TO DATE
46	SCHE	n/a	n/a	n/a
47	SETT	449,523	487,649	CONSOLIDATED
48	SKIP	n/a	n/a	n/a
49	STUD	474,146	483,054	CONSOLIDATED
50	SWIT	469,612	442,507	NONE TO DATE
51	SYNC	449,532	449,110	CONSOLIDATED
52	TELE	n/a	n/a	n/a
53	TIME	446,494	446,429	NONE TO DATE
54	TRAN	487,536	482,573	CONSOLIDATED
55	VERI	448,326	447,711	NONE TO DATE
56	VIEW	485,283	470,476	CONSOLIDATED

APPENDIX A

PENDING	PATENT	FINDING
1. A method of distributing data units, said data units comprising an information portion and an identification portion, said identification portion identifying at least one characteristic of said data units said method comprising the steps of: receiving a plurality of said data units on a multiple channel data stream, at least some of said data units being received sequentially; and performing the following steps for each of said received data units: (a) storing the received data units in a data buffer; (b) decoding the identification portion of the data units to identify the at least one characteristic of the data units (c) determining whether the data units should be distributed before or after one or more other of said data units based on the identified characteristic of the data units and (d) transmitting the data units in an order relative to other of said data units based on said step of determining.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

APPENDIX A

PENDING	PATENT	FINDING
	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

APPENDIX A

PENDING	PATENT	FINDING
5. A method for routing and distributing data units, each of said data units having an identification portion and an information content portion, said method using a switch with multiple data ports, a plurality of storage locations for storing and communicating each of said data units to a unique destination address and a controller for controlling said switch and said storage location, said method comprising the steps of: receiving the data units in an information stream, said stream having said data units separated in the time domain so that said data units are sequentially received by said switch; processing said data units by decoding the identification portion of each of said data units to identify the priority of the information content portion of said data units routing each of said data units to a data port on said switch; selecting a Storage location to store each of said data units and communicating each of said data units to said selected storage location to prioritize the transmission of each of said data units.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

APPENDIX A

PENDING	PATENT	FINDING
	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

APPENDIX A

PENDING	PATENT	FINDING
12. A method for routing and distributing data units, each of said data units having an identification portion and an information content portion, said method using a switch with multiple data ports, a plurality of storage locations for storing and communicating said data units and a controller for controlling said switch and said storage location, said method comprising the steps of: receiving the data units in an information stream, said stream having said data units separated in the time domain so that said data units are sequentially received by a switch; processing said data units by decoding the identification portion of each of said data units to identify the information content portion of said data units comparing the identification portion of said data units to predetermined timing data to determine a transmission time based on said identification portion of said data units and transmitting said data units based on said comparing step.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

APPENDIX A

PENDING	PATENT	FINDING
	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

APPENDIX A

PENDING	PATENT	FINDING
17. A method for routing and distributing data units, each of said data units having an identification portion and an information content portion, said method using a switch with multiple data ports, a plurality of storage locations for storing and communicating data units and a controller for controlling said switch and said storage location, said method comprising the steps of: receiving the data units in an information stream, said stream having said data units separated in the time domain so that said data units are sequentially received by a switch; processing said data units by decoding the identification portion of each of said data units to identify the information content portion of said data unit comparing said decoded identification portion of each of said data Units to predetermined priority data to determine a transmission priority; communicating an instruct-to-delay signal to cause a delay in the communication of said data units.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

APPENDIX A

PENDING	PATENT	FINDING
	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

APPENDIX A

PENDING	PATENT	FINDING
24. A method for routing and distributing data units, said data units having a first identification portion and a second multimedia information portion using a switch with multiple data ports, a data buffer and a controller for controlling said switch comprising the steps of: receiving the data units from a multiple channel data stream, said multiple channel data stream having said data units separated in the time domain so that said data units are sequentially received on a data port on said switch; processing said data units by decoding said first portion of said data units to identify the type of data in said second multimedia information portion and to identify a unique destination address that indicates routing information for said data units assigning a transmission priority to said data units based on said type of data in said second multimedia portion of said data units determined by said step of processing said data units by placing said data units into said data buffer and; transmitting said data units based on said assigned	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

APPENDIX A

PENDING	PATENT	FINDING
priority determined by the type of data in said second multimedia information portion of said data units to a data port on said switch.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

APPENDIX A

PENDING	PATENT	FINDING
33. A method for routing and distributing multimedia data, said multimedia data having a first identification portion and a second multimedia information portion using a network of switches each with multiple ports and a controller for controlling said network of switches comprising the steps of: receiving the multimedia data at an input on a first switch, said multimedia data having multimedia signal units separated in the time domain so that said multimedia data is sequentially received; NA processing said multimedia data units by decoding a first encoded portion of said multimedia data units to determine a destination address for said multimedia data units routing said multimedia data units to an output port on said network of switches based on said processing step; storing said multimedia data units in a temporary storage location based on said routing step that was determined in said processing step; transmitting said multimedia data units from said temporary storage device at an asynchronous time, said asynchronous time	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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determined by decoding said first encoded portion of said multimedia data units to determine the type of data in said second multimedia information portion to a second switch.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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38. A method for coding, decoding, routing and distributing multimedia data, said multimedia data having a first identification portion and a second multimedia information portion using a multiple port switch and a controller comprising the steps of: receiving multimedia data units from a multiple channel data stream, said multiple channel data stream having multimedia data units separated in the time domain so that said multimedia data units have an asynchronous arrival at a data port on said switch; processing said multimedia data units by decoding said first portion of said multimedia data units to identify the type of data in said second multimedia information portion and to identify a unique destination address that indicates routing information for said multimedia data units storing said multimedia signal in a temporary storage location based on said routing information determined in said processing step; processing said multimedia data units by decoding said second portion of said	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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multimedia data units and re-formatting said multimedia data from said second portion of said multimedia data units re-timing said re-formatted multimedia data units into a synchronous data stream.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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51. A method of processing . signals at a receiver station, said receiver station having a computer capable of responding to commands and controlling the communication of signals, said method comprising the steps of: inputting and storing a command, said command designating at least one of: (1) a signal to be stored, said signal including at least one of television, radio, video, audio, data, and computer programming; (2) a time to communicate said signal; and (3) a place to communicate said signal to or from, said place including at least one of a transmitter, video monitor, a speaker, a computer, a processor, a controller, a storage device, and a subscriber station; receiving said signal; storing said signal at a first storage location, said first storage location being capable of being commanded to store and output said signal; and outputting said signal from said first storage location to a second storage location in accordance with said command; storing said signal at said second storage location, said second storage	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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location being capable of being commanded to store and output said signal; and communicating said signal from said second storage location	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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52. A method of processing signals at a receiver station, said receiver station having a receiver for receiving a transmission, and a plurality of storage locations, each storage location capable of being commanded to store and output programming, said receiver station capable of selecting between each of said plurality of storage locations and communicating said programming between each of said plurality of storage locations, said method comprising the steps of: receiving an information transmission including programming comprising at least one of television, radio, video, audio, data, and computer programming; demodulating said information transmission; detecting said programming embedded in said information transmission; storing said programming at a first storage location; transferring said programming stored at said first location to a second location in response to a command; storing said programming at said second storage location to enable said receiver station to	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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transfer said programming from said second storage location to a computer at a specific time or in response to said command.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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59. A method of communicating signals in a network, said network including an origination station, at least one intermediate station that receives and transmits said signals, and at least one subscriber station, said method comprising the steps of: storing television programming at a first storage location, said television programming, including video and audio; transferring, under computer control, said television programming from said first storage location to a second storage location at a selected one of said at least one intermediate station; storing said television programming at said second storage location to enable said selected intermediate station to communicate said television programming from said second storage location to a selected one of said at least one subscriber station; communicating a programming identification signal from said origination station to said selected intermediate station, said programming identification si-signal identifying said	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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television programming stored at said second storage location; detecting, at said selected intermediate station, said programming identification signal communicated from said origination station; and communicating said television programming from said second storage location to said selected subscriber station based on said programming identification signal.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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60. A method of communicating signals in a network, said network including an origination station, at least one intermediate station that receives and retransmits said signals, and a plurality of subscriber stations that receive said signals, said method comprising the steps of: storing television programming at a first storage location at a first intermediate station, said first intermediate station being one of said at least one intermediate station in said network; transferring, under computer control, said television programming from said first storage location to a second storage location at a second intermediate station, said second intermediate station being one of said at least one intermediate station in said network; storing said television programming at said second storage location to enable the communication of said television programming from said second intermediate station to at least one of said plurality of subscriber stations.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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66. A method of processing signals at a receiver station comprising the steps of: receiving one of a broadcast and cablecast transmission; demodulating said one of a broadcast and cablecast transmission, said one of a broadcast and cablecast transmission including an embedded signal; detecting said embedded signal on said one of a broadcast and cablecast transmission; selecting information stored at a first storage location in response to said embedded signal; transferring said information from said first storage location to a second storage location based on said embedded signal, thereby providing a computer access to said information; said first storage location and said second storage location being capable of being commanded to store and output programming.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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68. A method of controlling the communication of television programming at a transmission station, where said television programming includes video and audio, said transmission station having at least one storage device for storing said television programming, transferring means for transferring said television programming within said transmission station from a first storage location to a second storage location, and a computer for controlling said transferring means and identifying said television programming on the basis of identification information associated with said television programming, said method comprising the steps of: inputting schedule information that specifies said television programming, and at least one of: (a) a time to communicate said television programming; and (b) a place to communicate said television programming to; transferring said television programming from said first storage location to said second storage location thereby enabling said transmission station to	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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communicate said television programming from said second storage location to a receiver station in accordance with said schedule information.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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72. A transmission station apparatus for communicating programming, said apparatus comprising: a receiver for receiving an information transmission, said information transmission including said programming; a first storage device connected to said receiver for storing said programming; a second storage device connected to said first storage device, said second storage device storing said programming output by said first storage device; a switch connected to said first storage device and said second storage device; a computer connected to said first storage device, said second storage device, and said switch for controlling said first storage device to output said programming to said second storage device and controlling said second storage device to output said programming to said switch, said computer being capable of: (1) selecting a storage device to store said programming; (2) commanding said switch to transfer said programming to said selected storage device; and (3) commanding said	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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selected storage device to store said programming; and a cable network connected to said switch for receiving said programming output from said second storage device and communicating said programming to a plurality of subscriber stations.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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74. An apparatus for controlling the communication of television programming at a transmission station comprising: a first storage device for storing said television programming; a second storage device for storing said television programming; a configurable switch connecting said first storage device to said second storage device; a modulator connected to said second storage device for communicating said television programming to subscribers; and a computer connected to said first storage device, said second storage device, and said configurable switch, said computer having a memory and being programmed to perform the following steps: (a) receiving and storing a programming schedule, said programming schedule designating said television programming, a time to communicate said television programming, and one of a communication channel and frequency for communicating said television programming; (b) controlling said first storage device to receive and	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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store said television programming; (c) controlling said configurable switch and said first storage device to transfer said television programming from said first storage device to said second storage device; (d) controlling said second storage device to store said television programming; and (e) controlling said second storage device and said modulator to communicate said television programming from said second storage device to said subscribers according to said programming schedule.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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75. A method of communicating subscriber station information from a subscriber station to at least one remote collection station, said method comprising the steps of: (1) inputting an instruct signal which is effective at said subscriber station to output a signal from a first storage location and store said signal at a second storage location; (2) detecting the presence of an instruction associated with said instruct signal, said instruction being effective at said subscriber station to generate subscriber station specific data and to select and assemble said subscriber station specific data into a record; (3) processing at said subscriber station inputted data and performing, in response to said instruction, one of: (a) generating subscriber station specific data and communicating said subscriber station specific data to a transmitter; and (b) selecting and assembling into said record said subscriber station specific data and communicating said record to a transmitter; and (4) transmitting said record to said at least one remote	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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collection station.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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76. A method of gathering information on the use of a signal at a receiver station, said receiver station having a processor, and a controlled device, said receiver station transferring said information to a remote station, said method comprising the steps of: (1) identifying at least one of a device and a control signal which operates to output a signal from a first storage location and store said signal at a second storage location; (2) monitoring said at least one of a device and a control signal; (3) storing a record of the use of said at least one of a device and a control signal; and (4) communicating said information from said record from said receiver station to said remote station.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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77. A method of controlling a network comprising at least one remote intermediate transmitter station and at least one receiver station, with said at least one remote intermediate transmitter station including a transmitter for transmitting data, a plurality of selective transfer devices each operatively connected to said transmitter, a data receiver for receiving data from at least one origination transmitter station, a control signal detector, and a computer capable of controlling said plurality of selective transfer devices, and with said at least one remote intermediate transmitter station adapted to detect a control signal, to control the communication of said data in response to said control signal, and to deliver said data to said transmitter, said method comprising the steps of: (1) receiving at said at least one origination transmitter station said data to be transmitted by said at least one remote intermediate transmitter station and delivering said data to said at least one origination transmitter, said data	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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comprising an instruct signal which is effective in said network to output a signal from a first storage location and store said signal at a second storage location; (2) receiving said control signal which operates at said at least one remote intermediate transmitter station to control the communication of said data; and (3) transmitting said control signal to said at least one origination transmitter before a specific time.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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78. A method of controlling a plurality of receiver stations each of which includes a data receiver, a signal detector, at least one computer, and with each of said plurality of receiver stations adapted to detect the presence of a control signal and to input a viewer reaction to an offer communicated in a mass medium program, said method of controlling comprising the steps of: (1) receiving a first code at a transmitter station, said first code designates one of a product or service offered in a mass medium program and a viewer reaction to an offer communicated in a mass medium program; (2) receiving a second code at said transmitter station, wherein said second code operates at said plurality of receiver stations to output a signal from a first storage location and store said signal at a second storage location; (3) transferring said first code and said second code to a transmitter at said transmitter station; and (4) transmitting said first code and said second code.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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79. A method of communicating data and update material to at least one of a plurality of receiver stations, each of which includes a data receiver, a data storage device, a control signal detector, a computer capable of processing data, with each of said plurality of receiver station adapted to detect and respond to an instruct signal and to store data for subsequent processing, said method comprising the steps of: (1) receiving data to be transmitted and delivering said data to a transmitter; (2) receiving an instruct signal which operates at at least one of said plurality of receiver stations to output a signal from a first storage location and store said signal at a second storage location; (3) transferring said instruct signal to said transmitter; and (4) transmitting an information transmission comprising said data and said instruct signal.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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PENDING	PATENT	FINDING
	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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80. An interactive method for data promotion and delivery for use with an interactive mass medium program output apparatus comprising the steps of: outputting a mass medium program that promotes data, said interactive mass medium program output apparatus having an input device to receive input from a subscriber; prompting said subscriber during said mass medium program whether said subscriber wants said data promoted in said step of outputting, said interactive mass medium program output apparatus having a memory for storing code; receiving a reply from said subscriber at said input device in response to said step of prompting, said interactive mass medium program output apparatus having a processor for processing said subscriber reply and said data; processing said reply and selecting code designating said data, said interactive mass medium program output apparatus having a transmitter for communicating information to a remote station;	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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communicating said selected code to said remote station, said interactive mass medium output apparatus and said remote station comprising a network having a plurality of transmitter stations; assembling, in said network, a signal which is effective at said interactive mass medium program output apparatus to store said data at said memory, said interactive mass medium program output apparatus having a receiver for receiving at least a portion of said signal from said remote station; delivering at least a portion of said signal at said interactive mass medium program output apparatus; and delivering said data on the basis of said signal.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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84. A method of controlling a receiver station, said receiver station having a processor performing a first function, said method comprising the steps of: detecting one of the presence and absence of a first control signal; inputting an instruct-to-react signal to said processor based on said step of detecting; controlling said processor to perform a second function and to output information in response to said step of inputting; and selecting data and generating a second control signal based on said step of controlling, said second control signal being effective to communicate said selected data to a storage device on the basis of said information.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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88. A method for identifying television programming in one of a broadcast and cablecast transmission station that has a storage device having (i) at least two storage locations each capable of storing a television signal, and (ii) a control device capable of controlling said storage device and identifying said television programming on the basis of identification information stored at said storage device, said method comprising the steps of: inputting identification information that identifies said television programming; inputting said television signal to said storage device; storing said television programming at a selected one of said at least two storage locations; and storing said identification information with said television programming at said selected location; and identifying said television programming on the basis of identification information associated in storage with said television programming.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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90. A method for identifying television programming in a broadcast and cablecast transmission station that has storage means having a first and a second storage location, wherein said storage means is capable of holding at least two units of said television programming, and control means capable of controlling said storage means and for identifying a selected unit of television programming on the basis of identification information associated with said selected unit, said method comprising the steps of: inputting identification information that specifies a unit of said television programming; inputting said unit of said television programming associated with said inputted identification information; identifying the unit of said television programming; storing said unit at said first storage location; and storing said identification information at said second storage location, thereby to enable said station to identify said unit stored in the first storage location on the basis of identification information stored in said second storage	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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location.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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91. A method for identifying and one of broadcasting and cablecasting television programming at a television transmission station, said transmission station capable of storing and transmitting a television transmission, said television transmission comprising units of television programming and identification information identifying said units of said television programming, said method comprising the steps of: inputting schedule information that identifies one of a category and a unit of said television programming; inputting said television transmission; locating identification information in said transmission that identifies said one of said category and said unit of said television programming; storing said television transmission at a first storage device; a determining that said identification information identifies said one of said category and said unit of said television programming; transferring information of said television programming transmission to a second storage device; and storing	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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said information of said television programming at said second storage device, thereby enabling said station to broadcast and/or cablecast television programming of said one of said category and said unit of said television programming.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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100. A method of communicating subscriber station information from a subscriber station to at least one remote collection station, said method comprising the steps of: (1) inputting an instruct signal which is effective at said subscriber station to select and control communication of a datum which identifies information contained in a program; (2) detecting the presence of at least one of an instruction, code and datum, associated with said instruct signal, which is effective at the subscriber station to one of generate subscriber station specific data and to select and assemble a plurality of specific and subscriber station specific data into a record; (3) processing at the subscriber station inputted data and performing, in response to said detected instruction, one of: (a) generating said subscriber station specific data and communicating said generated subscriber station specific data to a transmitter; and (b) selecting and assembling into said record a specific plurality of said subscriber specific data and	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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communicating said record and said selected specific plurality of said subscriber specific data to a transmitter; and (4) transmitting one of said communicated generated subscriber station specific data and said communicated record and specific plurality of said subscriber specific data to said at least one remote collection station.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 + Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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101. A method of processing signals at a receiver station comprising the steps of: (1) receiving information transmissions; (2) detecting a plurality of signals in at least one of said information transmissions, at least one of said detected plurality of signals being effective at said receiver station to instruct; (3) passing each detected instruct signal to a computer; (4) controlling said computer on the basis of each detected and passed instruct signal; (5) selecting and controlling communication, under computer control and in response to at least a first of said each detected and passed instruct signal, of a datum that identifies information contained in a program; and (6) storing information evidencing the passing of at least a second of said each detected and passed instruct signal.	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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103. A method of controlling a remote intermediate mass medium program transmitter station to communicate mass medium program material to a remote receiver station and controlling said remote receiver station to deliver an individualized mass medium program presentation, said method of controlling comprising the steps of: (1) receiving mass medium programming to be transmitted by the remote intermediate mass medium transmitter station and delivering said mass medium programming to a transmitter; (2) receiving at least one instruct signal at said remote intermediate mass medium transmitter station, said at least one instruct signal operates at the remote receiver station to select and control communication of a datum which identifies information contained in said mass medium programming, and communicating said at least one instruct signal to said transmitter; (3) receiving at least one control signal at said remote intermediate mass medium transmitter station, said at least one	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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control signal operates at the remote intermediate mass medium transmitter station to control communication of one of said mass medium programming and said at least one instruct signal; and (4) transmitting from said remote intermediate mass medium transmitter section an information transmission comprising said mass medium programming and said at least one instruct signal, said mass medium programming and said at least one instruct signal transmitted in accordance with said at least one control signal.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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104. A method of controlling a remote transmitter station to deliver a receiver specific mass medium program presentation at a receiver station, said method of communicating comprising the steps of: (1) receiving a mass medium program at the remote transmitter station and delivering said mass medium program to a transmitter; (2) receiving at said remote transmitter station at least one instruct signal which operates to select and control communication of one of a code and datum which identifies information contained in said mass medium program; (3) receiving a control signal which operates at the remote transmitter station to control the communication of at least one instruct signal and communicating said control signal to said remote transmitter station; (4) receiving one of said code and said datum designating a specific instruct signal of said at least one instruct signal to be transmitted by the remote transmitter station, and said transmitter station transferring said	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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designated specific instruct signal to a transmitter; and (5) transmitting from said remote transmitter station an information transmission comprising said mass medium program and said designated instruct signal, said designated instruct signal being transmitted at one of specific times and on specific channels.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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105. A method of controlling at least one of a plurality of receiver stations each of which includes a television receiver, a signal detector, at least one of a computer and processor, wherein each of said plurality of receiver stations is adapted to detect the presence of at least one control signal and to input a subscriber reaction to a specific offer communicated in a television program, said method comprising the steps of: (1) receiving at least one of a code and a datum at a transmitter station, said one of said code and said datum designates at least one of a product and a service offered in said television program and said subscriber reaction; (2) receiving said at least one control signal at said transmitter station, said at least one control signal at said at least one of said plurality of receiver stations operates to select and control communication of information at least one of received with and to be associated with said television program; (3) transferring at least one of (i) said code (ii) said datum and (iii) said at least one control	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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signal to a transmitter at said transmitter station at a specific time; and (4) transmitting (i) said at least one of said code and said datum and (ii) said at least one control signal from said transmitter station.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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106. A method of communicating television program material to at least one receiver station including one of a broadcast and cablecast television receiver, a television monitor, a control signal detector, a processor operatively connected to said television monitor, said processor programmed to detect and respond to at least one instruct signal in one of a broadcast and cablecast transmission, said method comprising the steps of: (1) receiving a television program at a transmitter station and delivering said television program to a transmitter; (2) receiving and storing said at least one instruct signal at said transmitter station, said at least one instruct signal at the receiver station operates to select and control communication of a datum which identifies information contained in said television program; (3) transferring said at least one instruct signal from said transmitter station to a transmitter; and (4) transmitting said television program and said at least one instruct signal from said	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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transmitter station to said at least one receiver station	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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107. A method of communicating programming in a communications network, said communications network including at least one origination station and an intermediate transmission station, said intermediate transmission station having a transmitter, at least one selective transfer device operatively connected to said transmitter for transferring programming, an automatic control unit operatively connected to said at least one selective transfer device, a first detector operatively connected to said automatic control unit for detecting first signals, a receiver operatively connected to said first detector, a second detector operatively connected to said transmitter for detecting second signals, and a logging unit operatively connected to said second detector, said method comprising the steps of: transmitting from said origination stations said programming, said programming including at least one signal for comparison; transmitting at least one retransmission	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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control signal from said origination stations; said intermediate transmission station receiving said programming; detecting and passing to said automatic control unit said at least one retransmission control signal; and aid automatic control ,it performing the step of selectively, transferring aid programming to said transmitter in accordance with said at least one retransmission control signal.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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108. A method of controlling a network having a remote intermediate transmitter station and at least one receiver station, with said remote intermediate transmitter station including at least one intermediate transmitter for transmitting a signal, a plurality of selective transfer devices each operatively connected to said at least one intermediate transmitter for communicating said signal, a receiver for receiving said signal from outside said network, an instruction detector, and a controller capable of controlling at least one of said plurality of selective transfer devices, and with said remote intermediate transmitter station adapted to (1) detect at least one instruction, (2) control communication of at least one signal in response to said at least one instruction, and (3) deliver said at least one signal to said at least one intermediate transmitter, said method comprising the steps of: receiving, said signal outside said network, said signal having at least one first instruction which is operative	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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in said network to output said signal from a first storage location and store said signal at a second storage location; receiving at least one second instruction outside said network, said at least one second instruction operative at said remote intermediate transmitter station to control communication of said signal; and transmitting said signal and said at least one second instruction to said network before a specific time.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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130. A method of controlling a network having a remote intermediate transmitter station and at least one receiver station, with said remote intermediate transmitter station including at least one intermediate transmitter for transmitting at least one signal, a plurality of selective transfer devices each operatively connected to said at least one intermediate transmitter for communicating, said at least one signal, a receiver for receiving said at least one signal from outside said network, an instruction detector, and a controller capable of controlling at least one of said plurality of selective transfer devices, and with said remote intermediate transmitter station receiving said at least one signal, at least one first instruction, and at least one second instruction, said method comprising the steps of: programming said remote intermediate transmitter station to control communication of and deliver said at least one signal at said at least one intermediate transmitter in response to at least one	'725 3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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detected instruction; programming said remote intermediate transmitter station to detect said at least one first instruction and said at least one second instruction; and programming said network to detect and respond to an instruction which is operative in said network to output said at least one signal from a first storage location and store said at least one signal at a second storage location before a specific time.	stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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152. A method of controlling a network having a remote intermediate transmitter station and at least one receiver station, with said remote intermediate transmitter station including at least one intermediate transmitter for transmitting data, a plurality of selective transfer devices each operatively connected to said at least one intermediate transmitter for communicating said data, a receiver for receiving said data from outside said network, a control signal detector, and a controller capable of controlling at least one of said plurality of selective transfer devices, and with said re mote intermediate transmitter station adapted to detect at least one control signal, to control the communication of said data in response to said at least one control signal, and to deliver said data at said at least one intermediate transmitter, said method comprising the steps of: receiving said data outside said network, said data including an instruct signal which is effective in said network to output said data		

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from a first storage location and store said data at a second storage location; receiving said at least one control signal outside said network, said at least one control signal operative at said remote intermediate transmitter station to control communication of said data; and transmitting said at least one control signal to said network before a specific time.		